

RESPONSE ACTION CONTRACT  
FOR REMEDIAL, ENFORCEMENT OVERSIGHT, AND NON-TIME  
CRITICAL REMOVAL ACTIVITIES AT SITES OF RELEASE OR  
THREATENED RELEASE OF HAZARDOUS SUBSTANCES  
IN EPA REGION VIII

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Interior Dust Sampling of Anaconda Schools  
Data Summary Report  
Community Soils Operable Unit 16  
Anaconda Smelter Superfund Site  
Anaconda - Deer Lodge County, Montana

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## STATEMENT OF AUTHENTICITY

The following data sets are considered to be final data generated or evaluated. Data have been designated as enforcement quality and screening quality as described in the *Clark Fork River Superfund Site Investigations (CFRSSI) Quality Assurance Project Plan (QAPP)* (ARCO 1992a) and *Data Management/Data Validation (DM/DV) Plan* (ARCO 1992b) as supplemented by addendum. The signatories below hereby stipulate to the authenticity and accuracy of the data and hereby waive any evidentiary or other objection as to the authenticity and accuracy of reference in endangerment assessments, public health evaluations, feasibility studies, and remedial design/remedial action (RD/RA) documents.

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## List of Acronyms and Abbreviations

AR	Atlantic Richfield Company
CDM Smith	CDM Federal Programs Corporation
CLP	EPA Contract Laboratory Program
DQO	data quality objective
DSR	data summary report
EPA	U.S. Environmental Protection Agency
HVS3	high-volume small surface sampler
mg/kg	milligrams per kilogram
NPL	National Priorities List
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PARCCS	precision, accuracy, representativeness, completeness, comparability, and sensitivity
QA	quality assurance/quality control
QAPP	quality assurance project plan
QC	quality control
ROD	Record of Decision
RPD	relative percent difference
RPM	Remedial Project Manager
SAP	sampling and analysis plan
Site	Anaconda Smelter Superfund Site
µg/m <sup>3</sup>	micrograms per cubic meter

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# Executive Summary

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This data summary report (DSR) summarizes the results of the 2018 Anaconda schools interior dust sampling activities within the Community Soils Operable Unit (OU) 16. Floor dust, personal air, and opportunistic grab samples are summarized for six separate sampling events, as follows:

- Head Start School – March 24, 2018
- Anaconda Junior/Senior High School – March 25, 2018
- Lincoln Elementary School – March 26, 2018
- Memorial Gym – March 26, 2018
- Fred Moodry Middle School – March 27, 2018
- Anaconda School District Administrative Building – March 27, 2018

The purpose of the sampling was to collect data at school locations to assist in addressing questions regarding arsenic and lead in interior dust and the potential for students and school personnel to contact interior dust with arsenic and lead concentrations that exceed residential soil clean up levels (250 milligrams per kilogram [mg/kg] arsenic and 400 mg/kg lead). Data collection was designed to be consistent with the residential indoor and attic dust sampling previously conducted by the Atlantic Richfield Company (AR). AR conducted this residential sampling to address concerns by the community over potential arsenic and lead concentrations in interior and attic dust. Further background, site description, and study purpose details are presented in the report.

The following sample types were collected to support this study:

- Collection of floor dust samples using the High Volume Small Surface Sampler (HVS3). Samples from floor mats placed at building entrances, hard flooring, and carpet were taken using the HVS3 sampling apparatus. The HVS3 floor sample results are included in this DSR.
- Collection of surface dust samples by micro-vacuum sampling. Samples from horizontal surfaces in classrooms and offices (e.g., shelves, desks, file cabinets), boiler rooms, hallways, air vents, gymnasiums, roof accesses, an attic, and other locations were collected using a micro-vacuum technique. However, samples collected by micro-vacuum were determined to be unusable due to low sample mass. The U.S. Environmental Protection Agency is planning to resample certain high dust areas (such as boiler rooms, roof accesses, and attics) with an emphasis on obtaining an analyzable sample mass.
- Collection of personal air samples on sampling staff during sample collection activities. These air sample results are included in this DSR.
- Collection of opportunistic solid media samples for informational purposes. These sample results are included in this DSR.

Table 1 exhibits a summary of the locations sampled at the six different school buildings. Table 2 provides a summary of data for the samples collected with quality assessments as defined in the *Anaconda Smelter Superfund Site, Interior Dust Sampling of Anaconda Schools, Data Management Plan* (CDM Smith 2018a), including the floor dust data with laboratory flags and qualifier codes, and the enforcement and screening assessment. Table 3 presents the floor dust duplicate sampling results. Table 4 presents the floor dust field blank results. Table 5 presents the personal air sampling results. Table 6 presents the results of two opportunistic solid media samples.



# Section 1

## Introduction

This data summary report was prepared for the U.S. Environmental Protection Agency (EPA) by CDM Federal Programs Corporation (CDM Smith) and summarizes the results of the 2018 Anaconda schools dust sampling activities within the Community Soils Operable Unit (OU) 16 of the Anaconda Smelter Superfund Site (Site). Interior dust, personal air, and opportunistic grab samples are summarized for six separate sampling events conducted in March 2018, at the locations shown on Figure 1. The location names and dates are as follows:

- Head Start School – March 24, 2018
- Anaconda Junior/Senior High School – March 25, 2018
- Lincoln Elementary School – March 26, 2018
- Memorial Gym – March 26, 2018
- Fred Moodry Middle School – March 27, 2018
- Anaconda School District Administrative Building – March 27, 2018

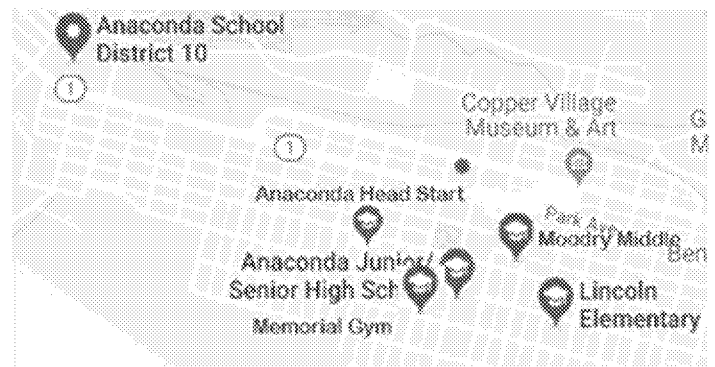


Figure 1 Locations of School Buildings and Head Start

The documents governing the 2018 Anaconda schools dust sampling are the *Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Schools, Anaconda Smelter Superfund Site* (CDM Smith 2018b) and the *Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Head Start, Anaconda Smelter Superfund Site, Rev. 1* (CDM Smith 2018c). The above-referenced sampling and analysis plans/quality assurance project plans (SAP/QAPPs) describe the technical requirements for conducting and analyzing interior dust, personal air, and grab samples for the 2018 Anaconda Schools dust sampling study. The extent of mining- and smelting-related contamination and risk have been characterized at the Site through remedial investigation and risk assessment. Feasibility studies have been completed and remedies documented in the various Records of Decision (RODs). Remedial action, driven by arsenic and lead concentrations, is well underway and is being conducted by Atlantic Richfield Company (AR).

The community requested that the schools be sampled to confirm that students are not being exposed to levels of these contaminants greater than the current residential cleanup levels. The Anaconda School District requested that school interiors be sampled to determine the potential for school personnel and students to contact arsenic and lead in interior dust at levels that are elevated relative to current residential cleanup levels in Anaconda.

## 1.1 Background, Site Descriptions, and Purpose

Large scale smelting and concentrating operations were conducted at the Site for over 100 years. Smelter emissions dispersed contaminants elevated in arsenic and metals over more than 300 square miles. Large amounts of slag and tailings were also produced. Current estimated waste volumes at the Site include 230 million cubic yards of tailings, 30 million cubic yards of slag, and 500,000 cubic yards of flue dust. Approximately 20,000 acres of soil were impacted by airborne emissions and millions of gallons of groundwater were contaminated. The milling and smelting contaminants pose well documented risks to human health and the environment.

The Site was placed on the National Priorities List in 1983 and remedies were selected as documented by multiple RODs for the following five OUs: OU 15 Mill Creek – 1987, OU 11 Flue Dust – 1991, OU 7 Old Works/East Anaconda Development Area – 1994, OU 16 Community Soils – 1996 and 2013 (ROD Amendment), and OU 4 Anaconda Regional Water, Waste & Soils - 1998 and 2011 (ROD Amendment).

To date, remedial actions to address Site contaminants has been implemented on more than 340 residential properties and for more than 11,500 acres of open space. Remedial action is ongoing at OUs 7, 16, and 4. Site-wide activities affecting all OUs, including final institutional controls, operations and maintenance, and groundwater and surface water remedies are also ongoing. The OU of interest to this sampling event was OU 16.

The 2018 Anaconda schools sampling was conducted to address the data gap of no interior dust samples having been collected previously. The following activities to support the study were as follows:

- Collect High Volume Small Surface Sampler (HVS3) vacuum samples of representative flooring in accessible interior spaces for analysis of arsenic and lead.
- Collect samples of dust from floormats placed at representative entrances to the schools placed 1 week prior to interior dust sampling for analysis of arsenic and lead in dust accumulated after 5 days of use.
- Where dust is visible in significant amounts, collect dust samples on surfaces in representative interior spaces using a hand-held micro-vacuum for analysis of arsenic and lead in dust accumulated under typical building maintenance/cleaning conditions.
- Collect personal air monitoring samples, one per sampler per school per day. Personal air monitoring is not required by Occupational Safety and Health Administration (OSHA) standards for this sampling event, but personal air monitoring samples were added at the request of the Anaconda School District. Time weighted average samples were collected on CDM Smith personnel during sampling activities.
- Where potential interior or exterior sources not identified during the December 2017 school reconnaissance are identified, collect opportunistic samples. Examples include unknown material directly outside school entrances, such as the black material near the entrances of the Administrative Building.

- Document observed conditions within or around sampled buildings that may indicate potential sources of dust to accessible interior spaces of buildings sampled.

## 1.2 Data Quality Objectives

The data quality objectives (DQOs) were provided in the SAP/QAPPs. The DQOs from the SAP/QAPPs (CDM Smith 2018b and 2018c) are presented in this section.

### 1.2.1 Step 1 – State the Problem

The purpose of this step is to describe the problem to be studied so that the focus of the study will be unambiguous.

No data existed on concentrations of arsenic and lead in dust in easily accessible interior spaces in the school buildings in Anaconda identified for this study. Sampling in residential properties across the Site had not identified an issue with interior dust, but no sampling had been done in the schools themselves. The community requested that the schools be sampled to confirm that students are not being exposed to levels of these contaminants greater than the current residential cleanup levels.

### 1.2.2 Step 2 – Identify the Goal of the Study

This step identifies how environmental data will be used in meeting objectives and solving the problem. The principal study question is:

- Is arsenic or lead present under typical conditions on representative surfaces (flooring and other horizontal surfaces showing visible accumulations of dust) in accessible areas in the schools at concentrations that exceed residential cleanup levels?

Secondary study questions are:

- Is arsenic or lead being tracked in from the exterior (as indicated by its presence on floor mats placed the week prior to sampling at representative entrances)?
- Is arsenic or lead present on representative surfaces (horizontal surfaces showing visible accumulations of dust) in the schools at concentrations that exceed residential cleanup levels?
- Do conditions exist in the buildings that might indicate obvious pathways for transport of contamination (e.g., obvious cracks or gaps in ceilings, evidence of soil or other materials tracked into the building, peeling paint)?
- Is arsenic or lead present in air at levels of concern?

### 1.2.3 Step 3 – Identify Information Inputs

The purpose of this step is to identify the information that needed to be obtained and the measurements taken to resolve the decision statement.

The following types of data were collected to supplement existing data:

- **Analytical Data.** Arsenic and lead concentrations from dust on floors or surfaces, air, and solid media. Floor dust samples came from HVS3 vacuuming of flooring and floor mats. Surface dust samples came from micro-vacuumed dust accumulations in typically non-accessible areas. Personal air samples and opportunistic solid media samples were also collected. It should be noted that resampling of micro-vacuum samples is necessary due to low sample masses which resulted in reporting limits not being met.
- **Sample-Specific Data.** Field notes describing how the sample was collected, who collected the sample, duration of sampling, and number of locations in a given sample,
- **Potential Exposure Path Data.** Field form data describing visual observations of potential pathways.
- **Geospatial Data.** Locational data was collected for all samples, as well as descriptive data about the samples and sampling event (e.g., “above door jamb in classroom 11B”)

Standard procedures were employed to ensure comparability in the analytical results. This included using a consistent sample labeling protocol. Specific parameters, detection limits, holding times, and other information are provided in SAP/QAPPs (CDM Smith 2018b and 2018c).

#### **1.2.4 Step 4 – Define the Boundaries of the Study**

The populations of interest are chemical and physical data for arsenic and lead concentration in dust in interior spaces in the buildings samples. Mobilization and field activities occurred on March 19, 2018, for the floor mats and from March 24 to 27, 2018, for the remaining samples. Travel and sampling activities were conducted during daylight hours, one school at a time. The order of the schools was affected by a basketball tournament that was concurrent with the sampling. Sampling and data collection was undertaken while the schools were on spring break.

In the context of this investigation, EPA will use the environmental media data collected to determine if concentrations of arsenic and lead in accessible interiors exceed the residential screening levels for those parameters.

#### **1.2.5 Step 5 – Develop the Analytic Approach**

The key parameter important to making decisions about the target populations is the individual result. The individual result for each sample will be used to answer the principal study questions. The usability of analytical data is determined based on the data validation and evaluation process.

#### **1.2.6 Step 6 – Specify Performance or Acceptance Criteria**

Tolerable limits on decision errors, which are used to establish performance goals for the data collection design are specified in this step. Decision makers are interested in knowing the true value of the constituent concentrations. Because analytical data are only estimates of the true values, decisions that are based on measurement data could be in error, which is referred to as decision error. There are two reasons why the decision maker may not know the true value of the constituent concentration:

- **Sampling design error** occurs when the sampling design is unable to capture the complete extent of variability that exists in the true state of the environment. Concentrations may

vary over time and space. Limited sampling may miss some features of this inherent variation because it is usually impossible or impractical to measure every point of a population.

- Measurement error refers to a combination of random and systematic errors that inevitably arise during the various steps to the measurement process. Analytical methods and instruments are never perfect; hence, a measurement can only estimate the true value of an environmental sample.

The combination of sampling design and measurement error is the total study error. Because it is impossible to eliminate total study error, basing decisions on sample concentrations may lead to a decision error. These errors may lead to either over-estimating or under-estimating the concentration of environmental contaminants. For example, over-estimating could result in removal of dust that is not a risk. Under-estimating may result in leaving contamination in place, which could continue to expose targets to unacceptable levels of contaminants.

Specific data validation processes were performed to evaluate whether analytical results were within acceptable limits. The data validation and usability discussion is presented in Appendix A. An evaluation of analytical control limits and of the precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) parameters was performed. No significant issues were identified.

The PARCCS parameters are:

- Precision. The precision of a measurement is an expression of mutual agreement among individual measurements of the same property taken under prescribed similar conditions. Precision is quantitative and most often expressed in terms of relative percent difference. Field duplicate samples were collected to provide a measure of the contribution to overall variability of field-related sources. Contribution of laboratory-related sources to overall variability is measured through various laboratory quality control (QC) samples (e.g., laboratory duplicates). Chemical analytical data was evaluated for precision using field duplicates, laboratory duplicates, or other method QC, as applicable.
- Accuracy. Accuracy is the degree of agreement of a measurement with an accepted reference or true value and is a measure of the bias in a system. Accuracy is quantitative and usually expressed as the percent recovery of a sample result. Ideally, it is desirable that the reported concentration equals the actual concentration present in the sample. Chemical analytical data was validated for accuracy using laboratory QC samples, calibration recoveries, inductively coupled plasma interference check sample results, interference check sample recoveries, inductively coupled plasma serial dilution results, and field and laboratory blanks, as applicable.
- Representativeness. Representativeness expresses the degree to which sample data accurately and precisely represent (a) a characteristic of a population, (b) parameter variations at a sampling point, and/or (c) an environmental condition. Representativeness is most concerned with the proper design of the sampling plan and the absence of cross-contamination. Representativeness is a consideration that was employed during all sample

location and collection efforts and was assessed by reviewing field procedures and actual sampling locations versus planned locations.

- **Comparability.** Consistency in the acquisition, handling, and analysis of samples is necessary for comparing results. Standard EPA analytical methods were used to ensure comparability of results with other analyses performed in a similar manner.
- **Completeness.** Completeness is a measure of the amount of usable data obtained from a measurement system compared to the amount that was expected to be obtained. Evaluating the PARCCS parameters will assess usability. Those data that are evaluated and need no qualification, or are qualified as estimated data, are considered usable. Rejected data are not considered usable. Completeness was calculated following data evaluation. For this investigation, a completeness goal of 90% was intended for all analytical data. This goal was met for the HVS3 floor dust samples and the personal air samples. This goal was not met for the micro-vacuum surface dust samples; thus, resampling may be necessary to adequately achieve this project objective.
- **Sensitivity.** Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as delineation levels or action levels. Analytical quantitation limits for arsenic and lead in the floor dust and air samples were below the level of interest to allow an effective comparison.

### 1.2.7 Step 7 – Develop the Plan for Obtaining Data

This step identified a resource-effective data collection design for generating data expected to satisfy the DQOs. The data collection design (sampling program) is described in detail in Section B of the SAP/QAPPs (CDM Smith 2018b and 2018c). The data collection design followed the program listed below. In general, indoor dust sampling at the schools was consistent with that in residential properties, as described in the Final Interim Interior and Attic Dust Sampling and Analysis Plan (AR 2007).

- **Floor Mat Sampling.** The school currently uses floor mats or steel grids just inside the buildings at points of entry to reduce tracking of dirt through the interiors. Clean mats were put in place the week prior to the sampling to collect samples under typical conditions to determine if arsenic and/or lead are being tracked into the schools. The floor mat sampling followed ASTM D5438-17, *Standard Practice for Collection of Floor Dust for Chemical Analysis*. These results will be compared to arsenic and lead residential cleanup levels. Results from floor mat sampling are intended to provide information on the potential source of those contaminants (interior versus exterior), not to measure exposure.
- **Floor Surface Sampling.** A representative number of floor areas were vacuumed under typical conditions to obtain dust samples for analysis of arsenic and lead in readily accessible interiors within the schools. Floor dust sampling followed ASTM D5438-17, *Standard Practice for Collection of Floor Dust for Chemical Analysis*. These data will be compared to residential cleanup levels.
- **Surface Sampling.** Interior dust from representative accessible and limited access (e.g., air vents, the tops of ceiling tiles, shelves, and I-beams) surface areas were sampled to

determine if potential sources of contamination are present in these spaces. Surface dust sampling followed ASTM D 7144-05a, *Standard Practice for Collection of Surface Dust by Micro-Vacuum Sampling for Subsequent Metals Determination*. However, the reporting limit objectives for these samples could not be achieved; therefore, the surface sampling results cannot to be used to determine if arsenic and/or lead is present in concentrations exceeding cleanup levels.

- **Personal Air Monitoring.** Personal air samples collected air from the breathing zone of the samplers during collection of floor surface samples and surface sampling to obtain data on the presence of arsenic and lead in the ambient air. The samples were collected by OSHA Method ID-105, *Inorganic Arsenic in Workplace Atmospheres*.
- **Opportunistic Samples.** During the sampling events, opportunistic solid media grab samples were collected at the discretion of the field team for information purposes. Deposits of fine-grained materials observed outside Administration Building entrance and a paint chip sample from the Moodry Middle School boiler room were collected.

## 1.3 Data Quality Assessment

### 1.3.1 Step 1 – Review DQOs and Sampling Design

The DQOs for the Anaconda school sampling study are presented in the previous section. Interior dust, personal air, and opportunistic grab samples and discharge measurements were collected at select locations specifically to meet requirements and objectives stated in DQO Step 2 – Identify the Goal of the Study.

### 1.3.2 Step 2 – Conduct Preliminary Data Review

Data validation was conducted for the dust and personal air samples analyzed by the EPA Contract Laboratory Program laboratory Bonner Analytical Testing, Hattiesburg, Mississippi and Katahdin Analytical Services, Scarborough, Maine. The data usability assessment is presented in Appendix A and Tables 2 through 6.

CDM Smith’s subcontractor laboratory, Katahdin Analytical Services, reported that the interior dust samples collected by micro-vacuum had insufficient mass to meet the reporting limit objectives. Therefore, analysis of these samples was terminated and resampling is planned at a future date with an emphasis on obtaining an analyzable sample mass.

Data validation was performed for all of the floor dust samples and laboratory QC samples analyzed by the EPA Contract Laboratory Program (CLP) laboratory, Bonner Analytical Testing. The air sampling data analyzed by Katahdin Analytical Services were also validated. A summary of the QA/QC validation and the laboratory results and qualifiers is presented in Appendix A. Data validation was not performed on the two opportunistic solid media samples that were collected for informational purposes only.

The summaries of analytical results along with applicable laboratory flags and validation qualifiers are provided in Table 2. Copies of the field logbook notes are included in Appendix B. Copies of the field sample data sheets are provided in Appendix C. Sample locations are provided in Appendix D. A data disk is provided in Appendix E.

### 1.3.3 Step 3 – Select the Statistical Test

The quality of the data in terms of PARCCS was evaluated using both laboratory and field generated QC samples. The data validation report is presented in Appendix A.

The data set was also evaluated in terms of completeness. The floor dust and air sampling can be considered 100% complete. Because the micro-vacuum surface dust samples could not meet reporting limits, the surface dust samples were 0% complete.

None of the validated data were rejected in the data validation process. All of the floor dust CLP data is enforcement quality. The personal air sample analyses conducted by Katahdin Analytical Services are also considered enforcement quality.

### 1.3.4 Step 4 – Verify Assumptions

The dust data necessary to evaluate the concentrations of key contaminants of concern (i.e., arsenic and lead) were collected from hard floors, carpets, and floor mats placed by the sample team at building entrances, as well as dust in air while sampling was being conducted. These data should be sufficient for evaluating typical dust conditions in actively used areas of the school buildings. The results of this study will be presented in the interpretive report prepared at a future date.

### 1.3.5 Step 5 – Conclusions Regarding Data Quality

The following is an assessment of the quality and quantity of the data collected under the SAP/QAPPs (CDM Smith 2018b and 2018c) and its intended uses as defined by the DQOs. The results of the Anaconda schools study will be presented in the interpretive report.

Intended Use of the Data	Assessment of the Data Quality
Is arsenic or lead present under typical conditions on representative surfaces (flooring and other horizontal surfaces showing visible accumulations of dust) in accessible areas in the schools at concentrations that exceed residential cleanup levels?	Data are of sufficient quality and quantity to begin this assessment
Is arsenic or lead being tracked in from the exterior (as indicated by its presence on floor mats placed the week prior to sampling at representative entrances)?	Data are of sufficient quality and quantity to begin this assessment
Is arsenic or lead present on representative surfaces (horizontal surfaces showing visible accumulations of dust) in the schools at concentrations that exceed residential cleanup levels?	Data are not of sufficient quantity to begin this assessment
Do conditions exist in the buildings that might indicate obvious pathways for transport of contamination (e.g., obvious cracks or gaps in ceilings, evidence of soil or other materials tracked into the building, peeling paint)?	Data are of sufficient quality and quantity to begin this assessment
Is arsenic or lead present in air at levels of concern?	Data are of sufficient quality and quantity to begin this assessment

## 1.4 Investigation Site Description

Investigation site descriptions were previously presented in Sections 1.1 and 1.2.



## 1.5 Sampling and Analysis Summary

### 1.5.1 Collection of Analytical and Field Data

In March 2018, interior dust, personal air, and opportunistic grab samples were collected at select locations as part of the Anaconda school sampling study. Appendix D shows the sample locations at each of the buildings. Table 1 summarizes the sample locations, dates, times, location descriptions, laboratories utilized, and analytical parameters for the Anaconda school sampling study.

## 1.6 Sampling Results

Analytical results, including the associated field QA/QC results, are summarized in Tables 2 through 6, as follows:

Table 2: Summary of Floor Dust Samples with Lab Flags, Data Validation Qualifiers, and Enforcement and Screening Assessment

Table 3: Summary of Floor Dust Sample Duplicate Sampling Results

Table 4: Summary of Floor Dust Rinsate Blank Analyses

Table 5: Summary of Personal Air Sampling Results

Table 6: Summary of Opportunistic Solid Media Samples

The data were assessed for usability based on the *Anaconda Smelter Superfund Site, Interior Dust Sampling of Anaconda Schools, Data Management Plan* (CDM Smith 2018a). The validation results, including enforcement and screening assessment qualifiers, laboratory flags, and validation qualifier codes are included with the results in each table.

The personal air samples collected by CDM Smith and analyzed by Katahdin Analytical Services did not have associated duplicate samples collected. However, QC samples including lot and field blanks of the sample cassettes were collected, and rigorous sampling and analysis procedures were employed. Therefore, all air sampling results are considered enforcement quality.

A summary of the QA/QC validation and laboratory data with qualifiers are included in Appendix A. Arsenic floor dust data analyzed by the CLP laboratory that were qualified with a "J" qualifier due to the sample result being between the method detection limit and the contract required detection limit were categorized enforcement quality.

The following summarizes the number of natural samples collected and analytes for the Anaconda schools sampling program:

- 55 natural floor dust samples
- Nine rinsate blank samples associated with the floor dust samples plus one sand blank
- Five field duplicate samples associated with the floor dust samples
- 25 personal air monitoring samples

- Five field blanks and one lot blank associated with the personal air monitoring samples

Arsenic and lead were the only analytes analyzed for all samples.

The following summarizes the natural samples collected for HVS3 surface vacuum sampling:

Samples analyzed for arsenic for all schools were reported back within a range of 3.7 mg/kg to 37.3 mg/kg. Samples analyzed for lead for all schools were reported back within a range of 22.8 mg/kg to 264 mg/kg. Table 1 provides the school location, sample location, unique sample identifiers, and Table 2 shows the associated sample results.

The following summarizes the natural samples collected for personal air sampling:

Samples analyzed for arsenic for all schools were reported back within a range of 0.15 µg/m<sup>3</sup> to 0.61 µg/m<sup>3</sup>. Samples analyzed for lead for all schools were reported back within a range of 0.024 µg/m<sup>3</sup> to 1.34 µg/m<sup>3</sup>. Table 5 provides the unique sample identifiers and associated air sample results.

## 1.7 Field QC Results

Data validation reports were completed by CDM Smith for the Anaconda schools sampling event. The completed validation reports are included in Appendix A. Laboratory flags and data validation qualifiers were applied to results as required. Laboratory data flags and qualifiers are listed in Tables 2 through 5. For the solid media samples in Table 6, no duplicates were collected due to the informational purpose of these samples.

### 1.7.1 Rinsate Blanks and Sand Blanks

Rinsate blanks were used to assess the cleanliness of the HVS3 sampling vacuum after decontamination. Rinsate blanks were collected by vacuuming 8 to 10 grams of silica bead sand through the decontaminated HVS3 into an unused catch bottle. Rinsate blanks were collected at a frequency of one blank per school, as specified in the SAP/QAPPs. Nine rinsate blanks and one sand blank sample were collected.

### 1.7.2 Field Duplicates

Field duplicates are used to assess field and laboratory precision. Floor dust field duplicates were collected at a frequency of 1 duplicate per 20 natural samples, satisfying the SAP/QAPP requirements. Five field duplicate samples were collected for the floor dust samples. No duplicates were collected for the personal air samples or informational solid media samples.

All field and laboratory relative percent difference results were within criteria. The field duplicate floor dust results are presented in Table 3.

### 1.7.3 Air Sampling Cassette Lot and Field Blanks

Lot blanks are collected to ensure air samples for metals analysis are collected on metals-free filters. A lot blank is a randomly selected filter cassette from a manufactured lot. For this sampling effort, one lot blank was selected at random from the lot number of cassettes used for air sampling. The lot blank remains unopened prior to being submitted to the laboratory. The entire batch of cassettes may be rejected if any metals are detected in a lot blank.

Field blanks are collected to evaluate potential contamination introduced during sample collection, shipping and handling, or analysis. For this sampling effort, field blanks for surface dust and air were collected at a rate of 1 each per school. Field blanks are collected by removing the end cap of the sample cassette to expose the filter in the same area where sample collection occurs for about 30 seconds before re-capping the sample cassette. The field blanks are then analyzed for metals.

All of the lot and field blank samples were non-detect for metals. The lot and field blank results are presented in Table 5.

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## Section 2

### Field SAP Deviations

The following deviations or modifications to the SAP/QAPP (CDM 2018b and 2018c) are listed below as they apply to the Anaconda school sampling study.

The procedure for the collection of the rinsate blanks from the HVS3 vacuum were slightly altered from the processes described in the SAP/QAPPs (CDM Smith 2018b and 2018c). Laboratory-grade water was not used to prepare any of the rinsate blanks. Silica bead sand was used as the blank medium. The blank process described in the Head Start SAP/QAPP (CDM Smith 2018c) specified pouring the silica sand through the disassembled main manifold parts. In the field, the HVS3 was reassembled after decontamination and 8 to 10 grams of silica sand was sucked through the vacuum from a nitrile-gloved hand.

For the sampling event on March 24 at the Head Start school, the following deviations were noted:

- Sample ID HeadstartHVFloor007 was expanded to include the janitors closet and the laundry room within the first-floor children's bathroom; however, the required volume of dust was not able to be collected. A sample was collected from the first-floor lounge HeadstartHVLounge to replace HeadstartHVFloor007.
- Two additional opportunistic micro-vacuum samples were collected (inside air ducts of classroom 2 – HeadstartMVOgrab001) and (ground level outside intake, utility room - HeadstartMVOgrab002). These opportunistic samples were requested by Chas Arriss (City of Anaconda official). Because the micro-vacuum samples were not analyzable, there are no associated sample results for these locations.

For the sampling event on March 25 at the Anaconda Junior/Senior High School, the following deviations were noted (although this was noted on March 25, 2018, at the Anaconda Junior/Senior High School, this deviation affects all schools sampled during the study):

- Floor mats were put in place on March 19, 2018, at all schools being sampled. After 4 to 8 days floormats were sampled and removed. The mats were sampled in place at all the schools and disposed of following sampling.

For the sampling event on March 26 at the Memorial Gym, the following deviations were noted:

- Two additional opportunistic micro-vacuum samples were collected (concrete shelf below vent – MemGymOgrab001)) and (SW men's restroom – MemGymOgrab002) HeadstartMVOgrab002). These opportunistic samples were requested by Chas Arriss (City of Anaconda official). Because the micro-vacuum samples were not analyzable, there are no associated sample results for these locations.

For the sampling event on March 27 at the Fred Moodry Middle School, the following deviations were noted:

- An opportunistic sample was collected of paint chips on the floor of the boiler room (MoodryOgrab004). This opportunistic sample was requested by Charlie Colman (EPA). Opportunistic micro-vacuum samples were collected from a window cutout of first floor men's restroom (MoodryMVOgrab001) and first floor storage room I-beams (MoodryMVOgrab002). These opportunistic samples were requested by Chas Arriss (Anaconda – Deer Lodge County Public Works Director). An opportunistic micro-vacuum sample was collected from a drop ceiling tile, decided by the sampling field team (MoodryMVOgrab003). Opportunistic micro-vacuum samples collected from third floor vent in room 34 (MoodryMVOgrab005), second floor vent in room 25 (MoodryMVOgrab006), and first floor vent room 17 (MoodryMVOgrab007). These opportunistic samples were requested by Carl Nyman (Anaconda – Deer Lodge County Superfund Coordinator). Because the micro-vacuum samples were not analyzable, there are no associated sample results for these locations.

The surface dust sampling followed ASTM D 7144-05a, *Standard Practice for Collection of Surface Dust by Micro-Vacuum Sampling for Subsequent Metals Determination*. However, after sampling was completed, it was determined that the samples had insufficient mass to meet the reporting limit objectives. Resampling is planned at a future date with an emphasis on obtaining an analyzable sample mass.

## 2.1 Effects of Deviations on Project Objectives

Changing the floor dust locations because of not being able to obtain sufficient volume of dust in accordance with the SAP/QAPP (HeadstartHVFloor007 for HeadstartHVLounge) has no negative implications on data quality because the area was substituted by a more suitable location.

The deviations regarding the collection of additional samples have no negative implications on data quality as described in the SAP/QAPPs (CDM Smith 2018b and 2018c) because all samples were opportunistic and add to the objectives of the study. However, the lack of results for the micro-vacuum samples means that the objective to determine if “arsenic or lead present on representative surfaces (horizontal surfaces showing visible accumulations of dust) in the schools at concentrations that exceed residential cleanup levels” cannot be evaluated at this time.

## Section 3

### References

ARCO 1992a. Clark Fork River Superfund Site Investigations, Quality Assurance Project Plan. Prepared for ARCO by PTI Environmental Services, Bellevue, Washington. May 1992.

ARCO 1992b. Clark Fork River Superfund Site Investigations, Data Management/Data Validation Plan. Prepared by ARCO, Anaconda, Montana. June 23, 1992.

AR 2007. Anaconda Smelter NPL Site, Community Soils Operable Unit, Final Interim and Attic Dust Sampling and Analysis Plan. Prepared by the Atlantic Richfield Company. June 19, 2007.

CDM Smith 2018a. Anaconda Smelter Superfund Site, Interior Dust Sampling of Anaconda Schools, Data Management Plan. Prepared by CDM for EPA. February 2018.

CDM Smith 2018b. Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Schools, Anaconda Smelter Superfund Site February 7, 2018.

CDM Smith 2018c. Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Head Start, Anaconda Smelter Superfund Site, Rev. 1. March 20, 2018.

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# Tables

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Table 1 Summary of Floor Dust Sample Locations, Descriptions, Sample Identification, and Analytical Parameters

Table 2 Summary of Floor Dust Samples with Lab Flags, Data Validation Qualifiers, and Enforcement and Screening Assessment

Table 3 Summary of Floor Dust Sample Duplicate Sampling Results

Table 4 Summary of Floor Dust Rinsate Blank Analyses

Table 5 Summary of Personal Air Sampling Results

Table 6 Summary of Opportunistic Solid Media Samples



**Table 1**  
**Summary of Floor Dust Sample Locations, Descriptions, Sample Identification, and Analytical Parameters**

Sample #	Sample Date	Location	Area (ft2)	Matrix	Analyses	CLP Sample #	Container	Lab
HeadstHVFImat001	3/24/2018	Head Start - Gnd Front Door	12	Floor Dust	CLP ICP-MS Metals	MH0AA0	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFImat002	3/24/2018	Head Start - 1st Floor Back Door	6	Floor Dust	CLP ICP-MS Metals	MH0AA1	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFImatRinsate001	3/24/2018	Head Start - Floor Mat Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AA2	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor001	3/24/2018	Head Start - Gnd Hallway	42	Floor Dust	CLP ICP-MS Metals	MH0AA3	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor002	3/24/2018	Head Start - Gnd Classroom 1	210	Floor Dust	CLP ICP-MS Metals	MH0AA4	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor003	3/24/2018	Head Start - Gnd Classroom 2	240	Floor Dust	CLP ICP-MS Metals	MH0AA5	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor004	3/24/2018	Head Start - 1st Floor Hallway	80	Floor Dust	CLP ICP-MS Metals	MH0AA6	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor005	3/24/2018	Head Start - 1st Floor Classroom 3	65	Floor Dust	CLP ICP-MS Metals	MH0AA7	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor006	3/24/2018	Head Start - 1st Floor Classroom 4	180	Floor Dust	CLP ICP-MS Metals	MH0AA8	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFloor007	3/24/2018	Head Start - 1st Floor Children's Restroom	168	Floor Dust	CLP ICP-MS Metals	MH0AA9	250 ml bottle	Bonner Analytical Testing Company
HeadstHVFImat002D	3/24/2018	Head Start HV Floor Duplicate	6	Floor Dust	CLP ICP-MS Metals	MH0AB0	250 mL bottle	Bonner Analytical Testing Company
LincolnHVFImat001	3/26/2018	Lincoln-1st Floor Main Door	12	Floor Dust	CLP ICP-MS Metals	MH0AB1	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFImat002	3/26/2018	Lincoln-1st Floor Playground Door	12	Floor Dust	CLP ICP-MS Metals	MH0AB2	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFImat003	3/26/2018	Lincoln-Ada Gym	12	Floor Dust	CLP ICP-MS Metals	MH0AB3	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFImat004	3/26/2018	Lincoln-1st Floor by RM11 Door	12	Floor Dust	CLP ICP-MS Metals	MH0AB4	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFImatRinsate002	3/26/2018	Lincoln Floor Mat Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AB5	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloorRinsate003	3/26/2018	Lincoln HV Floor Rinstate	NA	Floor Dust	CLP ICP-MS Metals	MH0AB6	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor001	3/26/2018	Lincoln-1st Floor Rm11	70	Surface Dust	CLP ICP-MS Metals	MH0AB7	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor002	3/26/2018	Lincoln-1st Floor Hall	180	Surface Dust	CLP ICP-MS Metals	MH0AB8	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor003	3/26/2018	Lincoln-1st Floor Library	83	Surface Dust	CLP ICP-MS Metals	MH0AB9	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor004	3/26/2018	Lincoln-2nd Floor Rm23	165	Surface Dust	CLP ICP-MS Metals	MH0AC0	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor005	3/26/2018	Lincoln-2nd Floor Staff Lounge	80	Surface Dust	CLP ICP-MS Metals	MH0AC1	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor006	3/26/2018	Lincoln-2nd Floor Hall	225	Surface Dust	CLP ICP-MS Metals	MH0AC2	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor007	3/26/2018	Lincoln-Ada Gym Stage/Classroom	110	Surface Dust	CLP ICP-MS Metals	MH0AC3	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor008	3/26/2018	Lincoln-Ada Gym Ball Court	300	Surface Dust	CLP ICP-MS Metals	MH0AC4	250 ml bottle	Bonner Analytical Testing Company
LincolnHVFloor003D	3/26/2018	Lincoln - Floor Duplicate (D)	80	Floor Dust	CLP ICP-MS Metals	MH0AC5	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFImat001	3/27/2018	Moodry-1st Floor Main Door	12	Floor Dust	CLP ICP-MS Metals	MH0AC6	250 ml bottle	Bonner Analytical Testing Company

**Table 1**  
**Summary of Floor Dust Sample Locations, Descriptions, Sample Identification, and Analytical Parameters**

MoodryHVFlmat002	3/27/2018	Moodry-1st Floor South Door	12	Floor Dust	CLP ICP-MS Metals	MH0AC7	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloorRinsate005	3/27/2018	Moodry HV Floor Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AC8	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor001	3/27/2018	Moodry-Gnd Floor Cafeteria	230	Floor Dust	CLP ICP-MS Metals	MH0AC9	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor002	3/27/2018	Moodry-Gnd Floor Boys Locker Room	500	Floor Dust	CLP ICP-MS Metals	MH0AD0	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor003	3/27/2018	Moodry-Gnd Floor IT Lab	50	Floor Dust	CLP ICP-MS Metals	MH0AD1	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor004	3/27/2018	Moodry-1st Floor Stage	100	Floor Dust	CLP ICP-MS Metals	MH0AD2	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor005	3/27/2018	Moodry-1st Floor Gym	210	Floor Dust	CLP ICP-MS Metals	MH0AD3	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor006	3/27/2018	Moodry-1st Floor Hall	110	Floor Dust	CLP ICP-MS Metals	MH0AD4	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor007	3/27/2018	Moodry-2nd Floor Rm 20	125	Floor Dust	CLP ICP-MS Metals	MH0AD5	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor008	3/27/2018	Moodry-2nd Floor Rm 22	60	Floor Dust	CLP ICP-MS Metals	MH0AD6	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor009	3/27/2018	Moodry-2nd Floor Rm 25	120	Floor Dust	CLP ICP-MS Metals	MH0AD7	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor010	3/27/2018	Moodry-3rd Floor Rm 30	55	Floor Dust	CLP ICP-MS Metals	MH0AD8	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor011	3/27/2018	Moodry-3rd Floor Rm 34	130	Floor Dust	CLP ICP-MS Metals	MH0AD9	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor012	3/27/2018	Moodry-3rd Floor Hall	270	Floor Dust	CLP ICP-MS Metals	MH0AE0	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFloor008D	3/27/2018	Moodry HV FloorField Duplicate (D)	65	Floor Dust	CLP ICP-MS Metals	MH0AE1	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFlmat001	3/25/2018	JSHigh - Gnd Floor Main Door	12	Floor Dust	CLP ICP-MS Metals	MH0AE2	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFlmat002	3/25/2018	JSHigh Gnd Floor Cafeteria Door	12	Floor Dust	CLP ICP-MS Metals	MH0AE3	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFlmat003	3/25/2018	JSHigh - Gnd Floor door by BandRm	6	Floor Dust	CLP ICP-MS Metals	MH0AE4	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFlmatRinsate006	3/25/2018	JS High Floor Mat Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AE5	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloorRinsate007	3/25/2018	JSHigh HV Floor Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AE6	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor001	3/25/2018	JSHigh-Gnd Floor Cafeteria	500	Floor Dust	CLP ICP-MS Metals	MH0AE7	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor002	3/25/2018	JSHigh-Gnd Floor Theater	30	Floor Dust	CLP ICP-MS Metals	MH0AE8	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor003	3/25/2018	JSHigh-Gnd Floor Band Room	90	Floor Dust	CLP ICP-MS Metals	MH0AE9	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor004	3/25/2018	JSHigh-Gnd Floor Hall	19	Floor Dust	CLP ICP-MS Metals	MH0AF0	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor005	3/25/2018	JSHigh-1st Floor Rm 201	65	Floor Dust	CLP ICP-MS Metals	MH0AF1	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor006	3/25/2018	JSHigh-1st Floor Rm 207	98	Floor Dust	CLP ICP-MS Metals	MH0AF2	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor007	3/25/2018	JSHigh-1st Floor Library	45	Floor Dust	CLP ICP-MS Metals	MH0AF3	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor008	3/25/2018	JSHigh-1st Floor Hall	190	Floor Dust	CLP ICP-MS Metals	MH0AF4	250 ml bottle	Bonner Analytical Testing Company

**Table 1**  
**Summary of Floor Dust Sample Locations, Descriptions, Sample Identification, and Analytical Parameters**

JSHighHVFloor009	3/25/2018	JSHigh-2nd Floor Rm 301	150	Floor Dust	CLP ICP-MS Metals	MH0AF5	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor010	3/25/2018	JSHigh-2nd Floor Rm 308	85	Floor Dust	CLP ICP-MS Metals	MH0AF6	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor011	3/25/2018	JSHigh-2nd Floor Rm 312	120	Floor Dust	CLP ICP-MS Metals	MH0AF7	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor012	3/25/2018	JSHigh-2nd Floor Hall	104	Floor Dust	CLP ICP-MS Metals	MH0AF8	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFImat003D	3/25/2018	JSHigh HV FloorField Duplicate (D)	6	Floor Dust	CLP ICP-MS Metals	MH0AF9	250 ml bottle	Bonner Analytical Testing Company
JSHighHVFloor002 D	3/25/2018	JSHigh HV FloorField Duplicate (D)	30	Floor Dust	CLP ICP-MS Metals	MH0AG0	250 ml bottle	Bonner Analytical Testing Company
MemGymHVFImat001	3/26/2018	Memorial Gym Gnd Floor Main Door	12	Floor Dust	CLP ICP-MS Metals	MH0AG1	250 ml bottle	Bonner Analytical Testing Company
MemGymHVFImatRinsate008	3/26/2018	Memorial Gym Floor Mat Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AG2	250 ml bottle	Bonner Analytical Testing Company
MemGymHVSFloorRinsate009	3/26/2018	MemGym HV Floor Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AG3	250 ml bottle	Bonner Analytical Testing Company
MemGymHVFloor001	3/26/2018	MemGym-Gnd Floor S. Office	50	Floor Dust	CLP ICP-MS Metals	MH0AG4	250 ml bottle	Bonner Analytical Testing Company
MemGymHVFloor002	3/26/2018	MemGym-Gnd Floor Locker Rm A	350	Floor Dust	CLP ICP-MS Metals	MH0AG5	250 ml bottle	Bonner Analytical Testing Company
MemGymHVFloor003	3/26/2018	MemGym-1st Floor Ball Court	180	Floor Dust	CLP ICP-MS Metals	MH0AG6	250 ml bottle	Bonner Analytical Testing Company
HVSandBlank	3/24/2018	Anaconda Schools	NA	silica beads	CLP ICP-MS Metals	MH0AG7	250 mL bottle	Bonner Analytical Testing Company
HeadstHVFloorLounge	3/24/2018	Head Start 1st Floor Lounge	129	Floor Dust	CLP ICP-MS Metals	MH0AG8	250 ml bottle	Bonner Analytical Testing Company
MoodryHVFImatRinsate004	3/27/2018	Moodry HV Floor Mat Rinsate	NA	Floor Dust	CLP ICP-MS Metals	MH0AG9	250 ml bottle	Bonner Analytical Testing Company
MoodryOgrab004	3/27/2018	Moodry - Paint chips in Boiler Rm	NA	Lead Paint	As, Pb	NA	Quart Ziplock	Katahdin Analytical Services
AdminOgrab001	3/27/2018	Administration - black material on ground outside of building	NA	Exterior	As, Pb	NA	Quart Ziplock	Katahdin Analytical Services

Table 2

## Summary of Floor Dust Samples with Lab Flags, Data Validation Qualifiers, and Enforcement and Screening Assessment

			ARSENIC		Descriptor Code	Utilization Category	LEAD		Descriptor Code	Utilization Category
School	Location	Sample Name	mg/kg	DV			mg/kg	DV		
Head Start	Head Start - 1st Floor Back Door	HEADSTHVFLMAT002	36.8	J	E	E	33.7		--	E
Head Start	Head Start - 1st Floor Children's Restroom	HEADSTHVFLFLOOR007	3.7	J	E	E	34.3		--	E
Head Start	Head Start - 1st Floor Classroom 3	HEADSTHVFLFLOOR005	8.9	J	E	E	22.8		--	E
Head Start	Head Start - 1st Floor Classroom 4	HEADSTHVFLFLOOR006	9.7	J	E	E	24.2		--	E
Head Start	Head Start - 1st Floor Hallway	HEADSTHVFLFLOOR004	21.7	J	E	E	42.6		--	E
Head Start	Head Start - 1st Floor Lounge	HEADSTHVFLFLOORLOUNGE	13.6	J	S	E	27.4		--	E
Head Start	Head Start - Gnd Classroom 1	HEADSTHVFLFLOOR002	19.8	J	E	E	40.8		--	E
Head Start	Head Start - Gnd Classroom 2	HEADSTHVFLFLOOR003	14.5	J	E	E	28.1		--	E
Head Start	Head Start - Gnd Front Door	HEADSTHVFLMAT001	32.7	J	E	E	51.2		--	E
Head Start	Head Start - Gnd Hallway	HEADSTHVFLFLOOR001	15.1	J	E	E	32		--	E
Head Start	Head Start- HV Floor Duplicate (D)	HEADSTHVFLMAT002D	37.3	J	E	E	34.1		--	E
JS High School	JSHigh - Gnd Floor door by BandRm	JSHIGHHVFLMAT003	25.1	J	S	E	53		--	E
JS High School	JSHigh - Gnd Floor Main Door	JSHIGHHVFLMAT001	22.4	J	S	E	72.2		--	E
JS High School	JSHigh- HV Flmat Field Duplicate (D)	JSHIGHHVFLMAT003D	22.2	J	S	E	48		--	E
JS High School	JSHigh- HV Floor Field Duplicate (D)	JSHIGHHVFLFLOOR002D	23.6	J	S	E	98.4		--	E
JS High School	JSHigh-1st Floor Hall	JSHIGHHVFLFLOOR008	15.5	J	S	E	53.6		--	E
JS High School	JSHigh-1st Floor Library	JSHIGHHVFLFLOOR007	30	J	S	E	111		--	E
JS High School	JSHigh-1st Floor Rm 201	JSHIGHHVFLFLOOR005	13	J	S	E	41.9		--	E
JS High School	JSHigh-1st Floor Rm 207	JSHIGHHVFLFLOOR006	17.1	J	S	E	118		--	E
JS High School	JSHigh-2nd Floor Hall	JSHIGHHVFLFLOOR012	12.5	J	S	E	71		--	E
JS High School	JSHigh-2nd Floor Rm 301	JSHIGHHVFLFLOOR009	11.2	J	S	E	77.4		--	E
JS High School	JSHigh-2nd Floor Rm 308	JSHIGHHVFLFLOOR010	14.3	J	S	E	120		--	E
JS High School	JSHigh-2nd Floor Rm 312	JSHIGHHVFLFLOOR011	10.7	J	S	E	134		--	E
JS High School	JSHigh-Gnd Floor Band Room	JSHIGHHVFLFLOOR003	22	J	S	E	109		--	E
JS High School	JSHigh-Gnd Floor Cafeteria	JSHIGHHVFLFLOOR001	11.8	J	S	E	33.7		--	E
JS High School	JSHigh-Gnd Floor Cafeteria Door	JSHIGHHVFLMAT002	21.3	J	S	E	50.7		--	E
JS High School	JSHigh-Gnd Floor Hall	JSHIGHHVFLFLOOR004	15.4	J	S	E	58.8		--	E
JS High School	JSHigh-Gnd Floor Theater	JSHIGHHVFLFLOOR002	22.5	J	S	E	78.8		--	E
Lincoln School	Lincoln - Floor Duplicate (D)	LINCOLNHVFLFLOOR003D	24.7	J-	S	E	42.2		--	E
Lincoln School	Lincoln-1st Floor by RM11 Door	LINCOLNHVFLMAT004	30.1	J	E	E	41.8		--	E
Lincoln School	Lincoln-1st Floor Hall	LINCOLNHVFLFLOOR002	19.2	J	E	E	32.2		--	E
Lincoln School	Lincoln-1st Floor Library	LINCOLNHVFLFLOOR003	24.1	J	E	E	44.5		--	E
Lincoln School	Lincoln-1st Floor Main Door	LINCOLNHVFLMAT001	30.4	J	E	E	71.3		--	E
Lincoln School	Lincoln-1st Floor Playground Door	LINCOLNHVFLMAT002	29.4	J	E	E	34.9		--	E
Lincoln School	Lincoln-1st Floor Rm11	LINCOLNHVFLFLOOR001	26.3	J	E	E	41.4		--	E
Lincoln School	Lincoln-2nd Floor Hall	LINCOLNHVFLFLOOR006	15.4	J-	S	E	30.7		--	E
Lincoln School	Lincoln-2nd Floor Rm23	LINCOLNHVFLFLOOR004	29.1	J-	S	E	111		--	E

**Table 2**  
**Summary of Floor Dust Samples with Lab Flags, Data Validation Qualifiers, and Enforcement and Screening Assessment**

			ARSENIC		Descriptor Code	Utilization Category	LEAD		Descriptor Code	Utilization Category
School	Location	Sample Name	mg/kg	DV			mg/kg	DV		
Lincoln School	Lincoln-2nd Floor Staff Lounge	LINCOLNHVFLOOR005	19	J-	S	E	38.5		--	E
Lincoln School	Lincoln-Ada Gym	LINCOLNHVFLMAT003	25.7	J	E	E	44.7		--	E
Lincoln School	Lincoln-Ada Gym Ball Court	LINCOLNHVFLOOR008	13.6	J-	S	E	28.3		--	E
Lincoln School	Lincoln-Ada Gym Stage/Classroom	LINCOLNHVFLOOR007	28.5	J-	S	E	53.7		--	E
Memorial Gym	MemGym-1st Floor Ball Court	MEMGYMHVFLOOR003	15	J	S	E	78		--	E
Memorial Gym	MemGym-Gnd Floor Locker Rm A	MEMGYMHVFLOOR002	14.1	J	S	E	93.7		--	E
Memorial Gym	MemGym-Gnd Floor Main Door	MEMGYMHVFLMAT001	28.8	J	S	E	54.9		--	E
Memorial Gym	MemGym-Gnd Floor S. Office	MEMGYMHVFLOOR001	28.9	J	S	E	264		--	E
Moodry School	Moodry-1st Floor Gym	MOODRYHVFLOOR005	21.7	J-	S	E	47.8		--	E
Moodry School	Moodry-1st Floor Hall	MOODRYHVFLOOR006	15.1	J-	S	E	63.7		--	E
Moodry School	Moodry-1st Floor Main Door	MOODRYHVFLMAT001	14.7	J-	S	E	24.6		--	E
Moodry School	Moodry-1st Floor South Door	MOODRYHVFLMAT002	29.4	J-	S	E	47.8		--	E
Moodry School	Moodry-1st Floor Stage	MOODRYHVFLOOR004	17.1	J-	S	E	100		--	E
Moodry School	Moodry-2nd Floor Rm 20	MOODRYHVFLOOR007	13.2	J-	S	E	46.4		--	E
Moodry School	Moodry-2nd Floor Rm 22	MOODRYHVFLOOR008	22.8	J-	S	E	88.4		--	E
Moodry School	Moodry-2nd Floor Rm 25	MOODRYHVFLOOR009	10.2	J-	S	E	53.5		--	E
Moodry School	Moodry-3rd Floor Hall	MOODRYHVFLOOR012	15.6	J	S	E	34.9		--	E
Moodry School	Moodry-3rd Floor Rm 30	MOODRYHVFLOOR010	22.3	J-	S	E	54.9		--	E
Moodry School	Moodry-3rd Floor Rm 34	MOODRYHVFLOOR011	15	J-	S	E	52		--	E
Moodry School	Moodry-Gnd Floor Boys Locker Room	MOODRYHVFLOOR002	14.1	J-	S	E	64.5		--	E
Moodry School	Moodry-Gnd Floor Cafeteria	MOODRYHVFLOOR001	13.4	J-	S	E	45.3		--	E
Moodry School	Moodry-Gnd Floor IT Lab	MOODRYHVFLOOR003	16.3	J-	S	E	49.6		--	E
Moodry School	Moodry-HV Floor Field Duplicate (D)	MOODRYHVFLOOR008D	26.4	J	S	E	82.8		--	E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

**Table 3**  
**Summary of Floor Dust Sample Duplicate Sampling Results**

School	Head Start		Descriptor Code	Utilization Category	Head Start		Descriptor Code	Utilization Category	Relative Percent Difference
Location Sample Name Sample Type	1st Floor Back Door HEADSTHVFLMAT002 N				Head Start- HV Floor Duplicate HEADSTHVFLMAT002D FD				
	Result mg/kg	DV			Result mg/kg	DV			
Arsenic	36.8	J	E	S	37.3	J	E	S	1.35
Lead	33.7			E	34.1			E	1.18

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality



**Table 3**  
**Summary of Floor Dust Sample Duplicate Sampling Results**

School	JS High School		Descriptor Code	Utilization Category	JS High School		Descriptor Code	Utilization Category	Relative Percent Difference
Location Sample Name Sample Type	JSHigh-Gnd Floor Theater JSHIGHHV FLOOR002 N				JSHigh- HV Floor Field Duplicate (D) JSHIGHHV FLOOR002D FD				
	Result mg/kg	DV			Result mg/kg	DV			
Arsenic	22.5	J	S	S	23.6	J	S		4.77
Lead	78.8			E	98.4				22.12

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

**Table 3**  
**Summary of Floor Dust Sample Duplicate Sampling Results**

School	JS High School		Descriptor Code	Utilization Category	JS High School		Descriptor Code	Utilization Category	Relative Percent Difference
Location Sample Name Sample Type	JSHigh - Gnd Floor door by BandRm JSHIGHHVFLMAT003 N				JSHigh- HV Flmat Field Duplicate (D) JSHIGHHVFLMAT003D FD				
	Result mg/kg	DV			Result mg/kg	DV			
Arsenic	25.1	J	S	S	22.2	J	S	S	12.26
Lead	53			E	48			E	9.90

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

**Table 3**  
**Summary of Floor Dust Sample Duplicate Sampling Results**

School	Lincoln School		Descriptor Code	Utilization Category	Lincoln School		Descriptor Code	Utilization Category	Relative Percent Difference
Location Sample Name Sample Type	Lincoln-1st Floor Library LINCOLNHVFLOOR003 N				Lincoln - Floor Duplicate (D) LINCOLNHVFLOOR003D FD				
	Result mg/kg	DV			Result mg/kg	DV			
Arsenic	24.1	J	S	S	24.7	J-	S	S	2.46
Lead	44.5			E	42.2			E	5.31

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

**Table 3**  
**Summary of Floor Dust Sample Duplicate Sampling Results**

School	Moodry School		Descriptor Code	Utilization Category	Moodry School		Descriptor Code	Utilization Category	Relative Percent Difference
Location Sample Name Sample Type	Moodry-2nd Floor Rm 22 MOODRYHVFLOOR008 N				Moodry-HV Floor Field Duplicate (D) MOODRYHVFLOOR008D FD				
	Result mg/kg	DV			Result mg/kg	DV			
Arsenic	22.8	J-	S	S	26.4	J	S	S	14.63
Lead	88.4			E	82.8			E	6.54

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UU = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

J- = The result is an estimated quantity, but the result may be biased low.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

**Table 4**  
**Summary of Floor Dust Rinsate Blank Analysis**

School Location Sample Name Sample Type	Anaconda Schools Anaconda Schools HVSANDBLANK BLANK		Descriptor Code	Utilization Category	Head Start Head Start - Floor Mat Rinsate HEADSTHVFLMATRINSATE001 RB		Descriptor Code	Utilization Category
	Result mg/kg	DV			Result mg/kg	DV		
<b>Arsenic</b>	0.96	UJ	S	S	0.98	UJ	E	S
<b>Lead*</b>	0.24	J		E	0.29	J		E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

\* J qualifiers were applied by the laboratory based on results being between the method detection limit and the contract required quantitation limit; however, no descriptor code required.

**Table 4**  
**Summary of Floor Dust Rinsate Blank Analysis**

School Location Sample Name Sample Type	JS High School JS HighFloor Mat Rinsate JSHIGHHVFLMATRINSATE006 RB		Descriptor Code	Utilization Category	JS High School JSHigh- HV Floor Rinsate JSHIGHHVFLLOORRINSATE007 RB		Descriptor Code	Utilization Category
	Result mg/kg	DV			Result mg/kg	DV		
<b>Arsenic</b>	0.94	UJ	S	S	0.98	UJ	S	S
<b>Lead*</b>	0.94	U		E	0.98	U		E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

\* J qualifiers were applied by the laboratory based on results being between the method detection limit and the contract required quantitation limit; however, no descriptor code required.

**Table 4**  
**Summary of Floor Dust Rinsate Blank Analysis**

School Location Sample Name Sample Type	Lincoln School Lincoln- Floor Mat Rinsate LINCOLNHVFLMATRINSATE002 RB		Descriptor Code	Utilization Category	Lincoln School Lincoln- HV Floor Rinsate LINCOLNHVFLOORRINSATE003 RB		Descriptor Code	Utilization Category
	Result mg/kg	DV			Result mg/kg	DV		
<b>Arsenic</b>	0.96	UJ	E	S	0.94	UJ	E	S
<b>Lead*</b>	1.5			E	1.3			E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

\* J qualifiers were applied by the laboratory based on results being between the method detection limit and the contract required quantitation limit; however, no descriptor code required.

**Table 4**  
**Summary of Floor Dust Rinsate Blank Analysis**

School Location Sample Name Sample Type	Memorial Gym MemGym-Floor Mat Rinsate MEMGYMHVFLMATRINSATE008 RB		Descriptor Code	Utilization Category	Memorial Gym MemGym-HV Floor Rinsate MEMGYMHVFLOORRINSATE009 RB		Descriptor Code	Utilization Category
	Result mg/kg	DV			Result mg/kg	DV		
<b>Arsenic</b>	0.96	UJ	S	S	0.98	UJ	S	S
<b>Lead*</b>	0.22	J		E	0.98	U		E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

\* J qualifiers were applied by the laboratory based on results being between the method detection limit and the contract required quantitation limit; however, no descriptor code required.



**Table 4**  
**Summary of Floor Dust Rinsate Blank Analysis**

School Location Sample Name Sample Type	Moodry School Moodry-Floor Mat Rinsate MOODRYHVFLMATRINSATE004 RB		Descriptor Code	Utilization Category	Moodry School Moodry-HV Floor Rinsate MOODRYHVFLOORRINSATE005 RB		Descriptor Code	Utilization Category
	Result mg/kg	DV			Result mg/kg	DV		
<b>Arsenic</b>	0.98	UJ	S	S	0.98	UJ	S	S
<b>Lead*</b>	0.14	J		E	0.25	J		E

**Notes:**

mg/kg = milligram per kilogram

DV = data validation qualifier

UJ = The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

Descriptor Code for Qualification

E = Inductively Coupled Plasma Serial Dilution Criteria

S = Matrix Spike Criteria

Utilization Category

S = Screening quality

E = Enforcement quality

\* J qualifiers were applied by the laboratory based on results being between the method detection limit and the contract required quantitation limit; however, no descriptor code required.

**Table 5**  
**Summary of Personal Air Sampling Results**

					ARSENIC		Utilization Category	LEAD		Utilization Category
School	Location	Sample Name	Sample Type	Unit	Result	DV		Result	DV	
Anaconda Schools	PERSAIRLOTBLANK	PERSAIRLOTBLANK	EB	ug/ft	0.5	U	E	0.1	U	E
Head Start	HEADST20	HEADST20	N	ug/m <sup>3</sup>	0.74	U	E	0.15	U	E
Head Start	HEADST21	HEADST21	N	ug/m <sup>3</sup>	0.76	U	E	0.15	U	E
Head Start	HEADST23	HEADST23	N	ug/m <sup>3</sup>	0.5	U	E	0.1	U	E
Head Start	HEADST24	HEADST24	N	ug/m <sup>3</sup>	0.75	U	E	0.15	U	E
Head Start	HEADST25	HEADST25	N	ug/m <sup>3</sup>	0.5	U	E	0.1	U	E
Head Start	HEADSTPERFIELDBLANK	HEADSTPERFIELDBLANK	FB	ug/ft	0.5	U	E	0.1	U	E
JS High School	JSHIGH20	JSHIGH20	N	ug/m <sup>3</sup>	0.59	U	E	0.12	U	E
JS High School	JSHIGH21	JSHIGH21	N	ug/m <sup>3</sup>	0.57	U	E	0.11	U	E
JS High School	JSHIGH23	JSHIGH23	N	ug/m <sup>3</sup>	0.6	U	E	0.12	U	E
JS High School	JSHIGH24	JSHIGH24	N	ug/m <sup>3</sup>	0.6	U	E	0.12	U	E
JS High School	JSHIGH25	JSHIGH25	N	ug/m <sup>3</sup>	0.6	U	E	0.12	U	E
JS High School	JSHIGHPERSFIELDBLANK	JSHIGHPERSFIELDBLANK	FB	ug/ft	0.5	U	E	0.1	U	E
Lincoln School	LINCOLN20	LINCOLN20	N	ug/m <sup>3</sup>	0.87	U	E	0.17	U	E
Lincoln School	LINCOLN21	LINCOLN21	N	ug/m <sup>3</sup>	0.91	U	E	0.18	U	E
Lincoln School	LINCOLN23	LINCOLN23	N	ug/m <sup>3</sup>	0.89	U	E	0.18	U	E
Lincoln School	LINCOLN24	LINCOLN24	N	ug/m <sup>3</sup>	0.9	U	E	0.18	U	E
Lincoln School	LINCOLN25	LINCOLN25	N	ug/m <sup>3</sup>	0.86	U	E	0.17	U	E
Lincoln School	LINCOLNPERSFIELDBLANK	LINCOLNPERSFIELDBLANK	FB	ug/ft	0.5	U	E	0.1	U	E
Memorial Gym	MEMGYM20	MEMGYM20	N	ug/m <sup>3</sup>	1.9	U	E	0.39	U	E
Memorial Gym	MEMGYM21	MEMGYM21	N	ug/m <sup>3</sup>	2.1	U	E	0.41	U	E
Memorial Gym	MEMGYM23	MEMGYM23	N	ug/m <sup>3</sup>	2	U	E	0.4	U	E
Memorial Gym	MEMGYM24	MEMGYM24	N	ug/m <sup>3</sup>	2	U	E	0.4	U	E
Memorial Gym	MEMGYM25	MEMGYM25	N	ug/m <sup>3</sup>	1.9	U	E	0.39	U	E
Memorial Gym	MEMGYMPERSFIELDBLANK	MEMGYMPERSFIELDBLANK	FB	ug/ft	0.5	U	E	0.1	U	E
Moodry School	MOODRY20	MOODRY20	N	ug/m <sup>3</sup>	0.56	U	E	1.34		E
Moodry School	MOODRY21	MOODRY21	N	ug/m <sup>3</sup>	0.69	U	E	0.14	U	E
Moodry School	MOODRY23	MOODRY23	N	ug/m <sup>3</sup>	0.56	U	E	0.11	U	E
Moodry School	MOODRY24	MOODRY24	N	ug/m <sup>3</sup>	0.7	U	E	0.14	U	E
Moodry School	MOODRY25	MOODRY25	N	ug/m <sup>3</sup>	0.55	U	E	0.11	U	E
Moodry School	MOODRYPERSFIELDBLANK	MOODRYPERSFIELDBLANK	FB	ug/ft	0.5	U	E	0.1	U	E

**Notes:**

ug/m<sup>3</sup> = microgram per meter cubed

ug/ft = microgram per filter

U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

S = Screening quality

N = Normal sample

FB = Field Blank

**Table 6**  
**Summary of Opportunistic Solid Media Samples**

Sample #	Sample Date	Location	Arsenic			Lead		
			mg/kg	Q	ES	mg/kg	Q	ES
MoodryOgrab004	3/27/2018	Moodry - Paint chips in Boiler Rm	5.7		S	192		S
AdminOgrab001	3/27/2018	Administration - black material on ground outside of building	8.6		S	19.9		S

## Appendix A

### Data Usability and Assessment Review





# **Draft Data Usability Assessment Review**

Interior Dust Investigation

Anaconda Schools

May 2018





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## Attachments

Attachment 1 Data Validation Reports



## Acronyms

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%D	percent difference
%R	percent recovery
AES	atomic emission spectrometer
CFRSSI	Clark Fork River Superfund Site Investigation
COC	chain-of-custody
CRQL	contract required quantitation limit
DM/DVP	Data Management/Data Validation Plan
DQI	data quality indicators
DQO	data quality objectives
DUAR	data usability and assessment review
EPA	U.S. Environmental Protection Agency
HVS3	High Volume Small Surface Sampler
ICP	Inductively Coupled Plasma
LCS	laboratory control sample
MDL	method detection limit
MS	matrix spike
PARCCS	precision, accuracy, representativeness, comparability, completeness, and sensitivity
QA	Quality assurance
QAPP	Quality Assurance Project Plan
QC	Quality control
RAC	Remedial Action Contract
RL	reporting limits
RPD	Relative percent difference
RSD	Relative standard deviation
SAP	Sampling and Analysis Plan
SDG	sample delivery group

# Section 1

## Data Usability and Assessment Review

The purpose of this data usability and assessment review (DUAR) is to summarize the data validation and determine whether the sample results meet the data quality objectives (DQOs) outlined in the *Sampling and Analysis Plan (SAP)/Quality Assurance Project Plan (QAPP), Interior Dust Sampling of Anaconda Schools, Anaconda-Deer Lodge County, Montana* (CDM Smith 2018a) and the *Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Head Start, Anaconda Smelter Superfund Site, Rev. 1* (CDM Smith 2018b). Data validation was performed on dust samples collected at four school buildings and the Anaconda Head Start located in the Anaconda Smelter Superfund Site in Anaconda-Deer Lodge County, Montana.

Dust samples were collected by CDM Smith under its Response Action Contract (RAC) with U.S. Environmental Protection Agency (EPA) for Region VIII (EPA Contract No. EP-W-05-049). Interior dust sampling activities were performed between March 24 and March 27, 2018. Two laboratories, Bonner Analytical Testing, Hattiesburg, Mississippi and Katahdin Analytical Services, Scarborough, Maine were used for sample analysis. All data were validated. Data validation was performed in accordance with the specific analytical methods, the site-specific SAP/QAPP (CDM Smith 2018), and the EPA National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017).

### 1.1 Usability Summary

For this DUAR, five data packages containing 55 dust samples, nine rinsate blank samples, one sand blank, five field duplicates, 25 personal air monitoring samples and six associated lot and field blanks were validated as required by the SAP/QAPP (CDM Smith 2018a/b). No field duplicates were collected for the personal air monitoring samples. Samples were collected and analyzed in accordance with the applicable SAP/QAPP (CDM Smith 2018a/b).

Data collected during this field investigation and validated for this DUAR are usable as reported. Applicable data validation qualifiers were added if required. Data utilization categories have also been applied to the samples as discussed in Section 4. No sample results were rejected. Specific details are provided in the validation reports presented in Attachment 1 and Section 5 of this report. A summary of the validation is presented in the following sections.

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## Section 2

# Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for ongoing quality control (QC) and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary to determine if data measurement objectives established in the SAP/QAPP (CDM Smith 2018) have been met. In general, the following data measurement objectives were considered:

- Achievement of analytical method and reporting limit requirements
- Adherence to and achievement of appropriate laboratory analytical QC requirements
- Achievement of required measurement performance criteria for data quality indicators (DQIs) PARCCS
- Adherence to sampling and sample handling procedures
- Adherence to the sampling design and deviations documented on field change notifications

The data validation review of the QA objectives verifies that the collected data are of sufficient quality to support their intended use.

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## Section 3

# Field and Laboratory Quality Assurance Activities

CDM Smith completed sampling activities in accordance with the approved SAP/QAPP (CDM Smith 2018a/b). Samples were collected between March 24 and March 27, 2018. The following is a summary of the number of samples collected and the dates on which the sampling events occurred:

<b>March 24 &amp; March 26, 2018 – SDG MH0AA7</b>
16 Dust Samples
1 Duplicate Sample
3 Rinsate Blank Samples
<b>March 24, March 25 &amp; March 26, 2018 – SDG MH0AG0</b>
6 Dust Samples
1 Duplicate Sample
3 Rinsate Blank Samples
<b>March 25 &amp; March 27, 2018 – SDG MH0AE0</b>
16 Dust Samples
2 Duplicate Samples
2 Rinsate Blank Samples
<b>March 26 &amp; March 27, 2018 – SDG MH0AC0</b>
18 Dust Samples
1 Duplicate Sample
1 Rinsate Blank Sample
<b>March 24 through March 27, 2018 – SDG SL2694</b>
25 Air Monitoring Samples
5 Field Blank Samples
1 Lot Blank

SDG – sample delivery group

All samples were received intact with proper chain-of-custody (COC) documentation at Bonner Analytical Testing and Katahdin Analytical Laboratories. Sample identification was accurately documented by the laboratory. The sample preparation and analyses were conducted within the method-specified holding times.

The SAP/QAPP (CDM Smith 2018a/b) defined the procedures to be followed and the data quality requirements for the field sampling events.

## 3.1 Deviations from Field Procedures

No major deviations from field procedures, COCs, or laboratory data package requirements were reported during this sampling investigation.

## 3.2 Field Quality Assurance/Quality Control

Five field duplicate samples were collected for this sampling event. The QC sample collection frequency satisfies the minimum requirements outlined in the project SAP/QAPP (CDM Smith 2018a/b).

Field QA/QC objectives were accomplished through the use of appropriate sampling techniques and collection of the required QC samples at the required frequencies.

## 3.3 Laboratory Quality Assurance/Quality Control

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control sample (LCS), matrix spike (MS) and calibration recoveries, serial dilutions, ICP interference checks, and other applicable QC parameters. As presented in the data validation reports in Attachment 1 of this report, the laboratory QC sample criteria met project requirements with the appropriate qualifiers applied. All data are considered usable.

### 3.3.1 Laboratory Methods

Samples were analyzed using a modified method ISM02.4 metals analysis: ICP-AES Analysis of Dust samples collected with a High Volume Small Surface Sampler (HVS3) vacuum and sieved by the laboratory. Method 6020A was used for the personal air filter samples. The methods used met project objectives.

## Section 4

# Data Validation Procedures

Data were validated and reviewed by qualified CDM Smith data validators not associated with project sampling activities. The data validation was performed in accordance with the EPA National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017). Validation reports were prepared and are presented in Attachment 1.

The following Sample Delivery Group (SDG) data packages were validated:

- EPA - SDG MH0AA7
- EPA - SDG MH0AG0
- EPA - SDG MH0AE0
- EPA - SDG MH0AC0
- Katahdin - SDG SL2694

As part of the Clark Fork River Superfund Site Investigation (CFRSSI) Data Management/Data Validation Plan (DM/DVP) (ARCO 1992) and Addendum (ARCO 2000), sample results are also assigned a data utilization category. There are three data utilization categories identified in the CFRSSI DM/DVP. These include, enforcement quality data, screening quality data, and unusable data. Enforcement quality data meet all QA/QC and documentation requirements. Screening quality data do not meet the applicable QA/QC requirements and/or documentation requirements. Unusable data may result from inappropriate sampling, analysis, or documentation procedures. Data that has not been qualified, qualified as nondetect, and laboratory results between the method detection limit and method reporting limit qualified as estimated are considered enforcement level. Sample results that are qualified as estimated based on validation criteria are considered screening quality unless a reproducible matrix effect is identified during the validation process. In the case of the arsenic floor dust results with "J" or "J-" data validation qualifiers, a consistent, reproducible effect is evident in the pattern of qualifiers; therefore, these data can be categorized as enforcement quality. No sample results were rejected and all data are usable. All floor dust and air sampling data is considered to be enforcement quality.

Data was also reviewed for completeness in order to assign Level A/B review status which encompasses reviewing field logbook documentation and sample chain of custody forms. These reviews are provided with the individual data validation reports in Attachment 1.

Descriptor codes identifying why a sample result was qualified have also been applied to sample results if required.



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## Section 5

### Data Quality Indicators

This section summarizes the validation performed and the overall quality of the data based on the PARCCS parameters. The validation report is provided in Attachment 1.

Achievement of the DQOs was determined by the use of DQIs. These DQIs for measurement data are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in Table 5-1 and in the sections below.

**Table 5-1 DQIs and Corresponding QC Parameters**

Data Quality Indicators	QC Parameters Evaluation in Data Review/Validation
Precision	Relative percent difference (RPD) values of: 1) Laboratory duplicates 2) Field duplicates
Accuracy/Bias	Percent recovery (%R) or percent difference (%D) values of: 1) Initial calibration verification %RSD 2) Continuing calibration verification %D 3) MS %R 4) LCS %R 5) ICP Interference Check Standards 6) ICP Serial Dilution 7) Initial Calibration %D Results of: 1) Instrument and calibration blanks 2) Method blanks
Representativeness	Results of all blanks Sample integrity (COC and sample receipt forms) Holding times
Comparability	Sample-specific reporting limits (RLs)/CRQLs Sample collection methods Laboratory analytical methods
Completeness	Data qualifiers Laboratory deliverables Requested/Reported valid results Field sample collection (primary and QC samples) Contract compliance (i.e., method and instrument QC within limits)
Sensitivity	Method RLs/CRQLs Adequacy of sample dilution

## 5.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of RPD between duplicate determinations.

RPD is calculated as follows:

$$\text{RPD} = \text{absolute value } [(C1-C2)/\{(C1+C2)/2\}] \times 100\%$$

Where:

C1 = concentration of primary sample  
C2 = concentration of duplicate sample

Field and analytical precision were determined from the review of the field duplicate and laboratory duplicate results. The duplicate sample results were compared by calculating their respective RPDs. The field duplicate samples were collected in the same manner as the original samples but were collected in separate, individual containers, given separate sample identifiers, and treated as unique samples by the laboratory.

For the field and laboratory duplicate RPD validation, a control limit of 35% RPD for soil/dust samples was used. Field and laboratory RPD results are summarized below:

### **SDG MH0AA7 (March 24 & March 26, 2018)**

- RPDs for field duplicate and laboratory duplicate samples were within the control limit of 35% for the dust samples.

### **SDG MH0AG0 (March 24 & March 25, 2018)**

- RPDs for field duplicate and laboratory duplicate samples were within the control limit of 35% for the dust samples.

### **SDG MH0AE0 (March 25 & March 27, 2018)**

- RPDs for field and laboratory duplicate samples were within the control limit of 35% for the dust samples.

### **SDG MH0AC0 (March 26 & March 27, 2018)**

- RPDs for field and laboratory duplicate samples were within the control limit of 35% for the dust samples.

### **SDG SL2694 (March 24 through March 27, 2018)**

- RPDs for laboratory duplicate samples were within the control limit of 35% for the dust samples.

## 5.2 Accuracy

Accuracy is the degree of agreement of a measurement with an accepted reference or true value and is a measure of the bias in a system. Accuracy of the data was assessed by comparing LCS recovery, MS recovery, calibration recovery, Inductively Coupled Plasma (ICP) interferences, and by performing serial dilution checks during metals analyses. Accuracy is expressed as percent recovery, which was calculated by:

$$\text{Percent Recovery} = \frac{(\text{Total Analyte Found} - \text{Analyte Originally Present}) \times 100}{\text{Analyte Added}}$$

Analytical accuracy for the entire data collection activity is difficult to measure because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure and duration of sampling
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained by adhering to the EPA method and approved field and analytical standard operating procedures.

Below is a summary of the accuracy parameters reviewed and the resulting qualifications for the for the data collected:

### **SDG MH0AA7 (March 24 & March 26, 2018)**

- LCS %Rs were within criteria.
- MS %Rs were within criteria.
- Serial dilution results were within criteria except for arsenic. All arsenic results were qualified as estimated "J/UJ."
- The initial and continuing calibration verifications were within acceptable criteria.
- ICP interference checks were within acceptable criteria.

### **SDG MH0AG0 (March 24 & March 25, 2018)**

- LCS %Rs were within criteria.
- MS %Rs were within criteria except for arsenic. All arsenic results were qualified as estimated "J/UJ."

- Serial dilution results were within criteria.
- The initial and continuing calibration verifications were within acceptable criteria.
- ICP interference checks were within acceptable criteria.

**SDG MH0AE0 (March 25 & March 27, 2018)**

- LCS %Rs were within criteria.
- MS %Rs were within criteria except for arsenic. All arsenic results were qualified as estimated biased low "J-/UJ."
- Serial dilution results were within criteria.
- The initial and continuing calibration verifications were within acceptable criteria.
- ICP interference checks were within acceptable criteria.

**SDG MH0AC0 (March 26 & March 27, 2018)**

- LCS %Rs were within criteria.
- MS %Rs were within criteria except for arsenic. All arsenic results were qualified as estimated biased low "J-/UJ."
- Serial dilution results were within criteria.
- The initial and continuing calibration verifications were within acceptable criteria.
- ICP interference checks were within acceptable criteria.

**SDG SL2694 (March 24 through March 27, 2018)**

- LCS and MS %Rs were within criteria.
- Serial dilution results were within criteria.
- The initial and continuing calibration verifications were within acceptable criteria.
- ICP interference checks were within acceptable criteria.

Sample preservation, handling, and holding times are additional measures of accuracy of the data. As discussed in Section 3, samples were analyzed within the appropriate holding times. The cooler temperatures for the dust samples were 24 degrees Centigrade. No qualification was required per the validation guidelines.

**5.2.1 Blank Contamination**

Field equipment blanks and laboratory method blanks are analyzed to identify possible sources of contamination. Contamination of a sample can be introduced by field sample collection

methods, sample handling, preparation, and/or analysis. The following sections discuss blank contamination validation actions.

**SDG MH0AA7 (March 24 & March 26, 2018)**

- Arsenic was detected in the laboratory preparation blank; however, no qualification was required as the negative blank result was greater than the negative contract required quantitation limit (CRQL).
- Lead was detected in the rinsate blank associated with the Lincoln and Head Start schools; no qualifications were required as sample results were greater than the CRQL or greater than ten times the CRQL.
- Laboratory calibration blanks were nondetect.

**SDG MH0AG0 (March 24 & March 25, 2018)**

- Laboratory preparation blanks were nondetect.
- Arsenic was detected in the continuing calibration blank. No qualifications were required as sample results were either nondetect or greater than the CRQL.
- Lead was detected in the rinsate blank associated with the Memorial School. No qualifications were required as sample results were either nondetect or greater than the CRQL.

**SDG MH0AE0 (March 25 & March 27, 2018)**

- Laboratory preparation and calibration blanks, and associated equipment rinsate blank results were nondetect.

**SDG MH0AC0 (March 26 & March 27, 2018)**

- Laboratory preparation blank results were nondetect.
- Arsenic was detected in the continuing calibration blank. No qualifications were required as sample results were greater than the CRQL.
- Lead was detected in the rinsate blank associated with the Memorial School. No qualifications were required as sample results were either nondetect or greater than the CRQL.

**SDG SL2694 (March 24 through March 27, 2018)**

- Lead was detected in the laboratory blanks as well as the field blank samples. Associated sample results were qualified as nondetect “U” for all samples except MOODRY20.

## 5.3 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection were designed to maximize sample representativeness.

Representativeness can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the COC forms and field data collection forms. Appropriate laboratory QA/QC requirements were described in the SAP/QAPP (CDM Smith 2018a/b) and laboratory statement of work to ensure that the laboratory analytical results were representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the sampling design and the approved SAP/QAPP (CDM Smith 2018) procedures and by using EPA-approved analytical methods for sample analyses. As a result, the data represents as near as possible the actual field conditions at the time of sampling.

Representativeness, as defined above, was met for the fieldwork and laboratory analyses. The data collected are suitable for a representative characterization of the project area.

## 5.4 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and EPA-approved analytical methods were followed by CDM Smith during collection activities. The sample analyses were performed by Bonner Analytical Testing and Katahdin Analytical Services using approved standard operating procedures. Utilizing such procedures and methods enables the current data to be comparable to future data sets generated with similar methods and units.

## 5.5 Completeness

Completeness of the field program is defined as the percentage of samples planned for collection as listed in the final work plan versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

$$A. \quad \% \text{Completeness} = C \times \frac{100}{n}$$

Where:

C = actual number of samples collected

n = total number of samples planned

$$B. \quad \% \text{Completeness} = V \times \frac{100}{n'}$$

Where:

V = number of measurements judged valid

n' = total number of measurements made

The overall completeness goal for these sampling events was 90% for all project data.

All samples outlined in the SAP/QAPP (CDM Smith 2018a/b) were collected in the field as planned to meet specific sampling activity objectives. The completeness for the number of samples planned to be collected versus the number of samples collected was 100% for all analyses.

Analyses for the sampling event met the 90% completeness goal of acceptable data for the number of measurements judged to be valid versus the total number of measurements made.

One hundred percent of the data validated and reported are suitable for their intended use for site characterization. No results were rejected, and all data collected met the overall project objectives. All floor dust and air sample data are considered to be enforcement quality. The completeness goals for both the number of samples collected for all sampling events and the number of measurements judged to be valid were met.

The DQOs were achieved; the data reported are suitable for their intended use as stated in the SAP/QAPP (CDM Smith 2018a/b). The achievement of the completeness goals for the data provides sufficient data for project decisions.

## 5.6 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest such as delineation levels or action levels. Analytical quantitation limits for the various sample analytes should be below the level of interest to allow an effective comparison.

### Detection Limits

The MDL study attempts to answer the question, "What is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero"? The study is based upon repetitive analysis of an interference-free sample spiked with a known amount of the target analyte. The MDL is a measure of the ability of the test procedure to generate a positive response for the target analyte in the absence of any other interferences from the sample.

The RL/CRQL is generally defined as the lowest concentration at which an analyte can be confidently reported in a sample and its concentration reported with a reasonable degree of



accuracy and precision. For samples that do not pose a particular matrix problem, the RL/CRQL is typically about three to five times higher than the MDL.

Laboratory results are reported according to rules that provide established certainty of detection and RLs/CRQLs. The result for an analyte is flagged with a "U" if that analyte was not detected or qualified with a "J" flag if associated QC results fall outside the appropriate DQIs. Additionally, if an analyte is present at a concentration between the MDL and the RL/CRQL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

The laboratory applied qualifiers to applicable sample results to identify those being reported as detected below the RL/CRQL. For each analyte, laboratory RLs/CRQLs were low enough to compare to the project criteria stated in the laboratory statement of work and the SAP/QAPP (CDM Smith 2018).

## Section 6

# Assessment of Data Usability and Reconciliation with Work Plan Goals

One hundred percent of the data reported and validated in this DUAR are suitable for their intended use as stated in the SAP/QAPP (CDM Smith 2018). No sample results were rejected. All floor dust and air sample data are considered to be enforcement status.

The achievement of the completeness goals for the number of samples collected and the number of sample results acceptable for use provides sufficient quality data to support project decisions. Sample results that were qualified as estimated are usable for project decisions.

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## Section 7

### References

ARCO, 1992. Clark Fork River Superfund Site Investigations Data Management/Data Validation Plan, June 1992.

ARCO, 2000. *Clark Fork River Superfund Site Investigations Data Management/Data Validation Plan Addendum*, June 2000.

CDM Smith, 2018a. Sampling and Analysis Plan/Quality Assurance Project Plan (QAPP), Interior Dust Sampling of Anaconda Schools, Anaconda-Deer Lodge County, Montana, January 2018.

CDM Smith 2018b. *Sampling and Analysis Plan/Quality Assurance Project Plan, Interior Dust Sampling of Anaconda Head Start, Anaconda Smelter Superfund Site, Rev. 1*. March 20, 2018.

EPA 2017. National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-540-R-2017-001, January 2017.

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# Attachment 1

## Data Validation Reports

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**Anaconda School Sampling  
CLP Metals Data Validation Report**

Sample Delivery Group (SDG) Number: MH0AA7  
 Laboratory: Bonner Analytical  
 Matrix: Dust  
 Collection date: 3/24/2108 & 3/26/2108  
 Analysis/Methods: CLP Total Recoverable Metals - ICP AES (Arsenic and Lead)

<u>Sample Number</u>	<u>CLP Number</u>	<u>Sample Number</u>	<u>CLP Number</u>
Head Start - Gnd Front Door	MH0AA0	Head Start- HV Floor Duplicate	MH0AB0
Head Start - 1st Floor Back Door	MH0AA1	Lincoln-1st Floor Main Door	MH0AB1
Head Start - Floor Mat Rinsate	MH0AA2	Lincoln-1st Floor Playground Door	MH0AB2
Head Start - Gnd Hallway	MH0AA3	Lincoln-Ada Gym	MH0AB3
Head Start - Gnd Classroom 1	MH0AA4	Lincoln-1st Floor by RM11 Door	MH0AB4
Head Start - Gnd Classroom 2	MH0AA5	Lincoln- Floor Mat Rinsate	MH0AB5
Head Start - 1st Floor Hallway	MH0AA6	Lincoln- HV Floor Rinsate	MH0AB6
Head Start - 1st Floor Classroom 3	MH0AA7	Lincoln-1st Floor Rm11	MH0AB7
Head Start - 1st Floor Classroom 4	MH0AA8	Lincoln-1st Floor Hall	MH0AB8
Head Start - 1st Floor Children's Restroom	MH0AA9	Lincoln-1st Floor Library	MH0AB9

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017) .

**Metals**

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Precision:			
Are the field duplicate relative percent differences (RPD) $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?	Yes		
Are the laboratory duplicate RPDs $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?	Yes		
Are the matrix spike duplicates RPD $\leq$ 20%?	N/A		
<u>Comments (note deviations):</u>			

<u>Field Duplicates</u>	<u>Sample</u> Head Start - 1st Floor Back Door MH0AA1	<u>Duplicate</u> Head Start- HV Floor Duplicate MH0AB0	<u>CRQL</u>	<u>RPD %</u>  Acceptable	<u>Qualifier</u>	<u>Associated Samples</u>
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<u>MS/MSD</u> N/A	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
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<u>LCSD</u> N/A	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
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<u>Laboratory Duplicate</u>	<u>Sample</u>	<u>Duplicate</u>	<u>CRQL</u>	<u>RPD %</u>  Acceptable	<u>Qualifier</u>	<u>Associated Samples</u>
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	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Accuracy:			
Were serial dilutions analyzed and within control limits of $\pm$ 10% for waters ( $\pm$ for 15% for soils) or initial sample result less than 50x MDL?	No		
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?	No		
Was post digestion spike criteria met (if applicable)?	NR		
Was laboratory control sample criteria met?	Yes		
Was laboratory blank criteria met (within control limits)?	No		
Were ICV/CCV % recoveries within 90-110%?	Yes		
Were the Detection Limit PQL Standards within 70-130?	N/A		
Was the %D on form 15-IN for the initial calibration instrument response and concentration data $<$ 30%?	Yes		
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?	Yes		
Was the tune %RSD $<$ 5% ?	N/A		
Was internal standard criteria met?	N/A		
<u>Comments (note deviations):</u>			



Serial Dilution	<u>Analyte</u> Arsenic	<u>Initial Sample Result</u> (mg/kg) 32.7	<u>%D</u> 16%	<u>50 x MDL</u> 4.3	<u>Qualifier</u> J/UJ	<u>Associated Samples</u> All samples
MS	<u>Analyte</u> Lead	<u>%R</u> 146%	<u>Limits</u> 75-125	<u>Post Digestion % R</u> NR	<u>Qualifier</u> None	<u>Associated Samples</u> Initial sample result > 4xs the spike added
LCS	<u>Analyte</u>	<u>%R</u> Acceptable	<u>Limits</u>		<u>Qualifier</u>	<u>Associated Samples</u>
ICV/CCV	<u>Analyte</u>	<u>%R</u> Acceptable	<u>Limits</u>		<u>Qualifier</u>	<u>Associated Samples</u>
Blanks <u>Prep Blank</u> Arsenic	Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.					
	<u>Result</u> -0.094		<u>MDL/CRQL</u> 0.086 / 1.0		<u>Qualifiers</u> None	<u>Associated Samples</u> - Blank result > -CRQL
<u>ICB</u>	<u>Analyte</u>	<u>Result (ug/L)</u> Nondetect	<u>MDL/CRQL</u>		<u>Qualifier</u>	<u>Associated Samples</u>
<u>CCB</u>	<u>Analyte</u>	<u>Result (ug/L)</u> Nondetect	<u>MDL/CRQL</u>		<u>Qualifier</u>	<u>Associated Samples</u>
<u>Field Blank</u>	<u>Analyte</u>	<u>Result</u>	<u>MDL/CRQL</u>		<u>Qualifier</u>	<u>Associated Samples</u>
Head Start - Floor Mat Rinsate	Lead	0.29 J	0.13 / 1.0		None	Sample results > CRQL
Lincoln- Floor Mat Rinsate	Lead	1.5	0.13 / 1.0		None	Sample results > 10x CRQL
Lincoln- HV Floor Rinsate	Lead	1.3	0.13 / 1.0		None	Sample results > 10x CRQL
ICSA/AB	<u>Analyte - Solution A</u>	<u>%R</u> Acceptable	<u>Found Sol. A / True A</u>	<u>CRQL</u>	<u>Qualifier</u>	<u>Associated Samples</u>
CRQL Check N/A			<u>%D</u>		<u>Qualifiers</u>	<u>Associated Samples</u>
Tune N/A	<u>Analyte</u>	<u>%RSD</u>	<u>Limits</u>		<u>Qualifier</u>	<u>Associated Samples</u>
Internal Standard N/A	<u>Standard / Element</u>	<u>%RI</u>	<u>Affected Analyte</u>	<u>Limits</u>	<u>Qualifier</u>	<u>Associated Samples</u>
Initial Calibration %D (Form 15)	<u>Analyte</u>	<u>%D</u> Acceptable	<u>Limits</u>		<u>Qualifier</u>	<u>Associated Samples</u>

**Representativeness:**

Were sampling procedures and design criteria met?

Yes No N/A

Were holding times met?

Yes

Were preservation criteria met? (0 - 6°C)

Yes

Were Chain-of-Custody records complete and provided in data package?

No

Was the raw data present for drying logs, preparation logs, analytical instrument real-time printouts and laboratory bench sheets?

Yes

Were results less than MDL reported with a "U" and values less than the CRQLs but greater than MDL reported with a "J"?

Yes

Comments (note deviations):

Yes

Cooler temperature was 24°C. No qualification was required per guidelines and method.

Holding TimesAnalyteDays to AnalysisHT CriteriaQualifierAssociated Samples

Acceptable

**Completeness (90%):**Yes No N/A

Are all data in this SDG usable?

Yes

Comments (note deviations):**Sensitivity:**Yes No N/A

Are MDLs present and reported?

Yes

Do the reporting limits meet the project requirements?

Yes

Comments (note deviations):**Overall Comments:**

Data Validator:

Kristine Molloy

Date:

4/26/2018

Data Reviewer:

Cherie Zakowski

Date:

4/27/2018

**Anaconda School Sampling  
CLP Metals Data Validation Report**

Sample Delivery Group (SDG) Number: MH0AG0  
 Laboratory: Bonner Analytical  
 Matrix: Dust  
 Collection date: 3/24/2108 3/25/2108 & 3/26/2108  
 Analysis/Methods: CLP Total Recoverable Metals - ICP AES (Arsenic and Lead)

<u>Sample Number</u>	<u>CLP Number</u>	<u>Sample Number</u>	<u>CLP Number</u>
JSHigh- HV Floor Field Duplicate (D)	MH0AG0	MemGym-Gnd Floor Locker Rm A	MH0AG5
MemGym-Gnd Floor Main Door	MH0AG1	MemGym-1st Floor Ball Court	MH0AG6
MemGym-Floor Mat Rinsate	MH0AG2	Anaconda Schools	MH0AG7
MemGym-HV Floor Rinsate	MH0AG3	Head Start - 1st Floor Lounge	MH0AG8
MemGym-Gnd Floor S. Office	MH0AG4	Moody-Floor Mat Rinsate	MH0AG9

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017) .

**Metals**

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Precision:			
Are the field duplicate relative percent differences (RPD) ≤ 20% for water ≤35% for soils or within CRQL criteria?		Yes	
Are the laboratory duplicate RPDs ≤ 20% for water ≤35% for soils or within CRQL criteria?		No	
Are the matrix spike duplicates RPD ≤ 20%?		N/A	
<u>Comments (note deviations):</u>			

<u>Field Duplicates</u>	<u>Sample</u>	<u>Duplicate</u>	<u>CRQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
	JSHigh-Gnd Floor Theater** MH0AE8	JSHigh- HV Floor Field Duplicate (D) MH0AG0		Acceptable		

\*\* Reported in SDG MH0AE0

<u>MS/MSD</u>	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
N/A					

<u>LCSD</u>	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
N/A					

<u>Laboratory Duplicate</u>	<u>Sample</u>	<u>Duplicate</u>	<u>CRQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
				Acceptable		

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Accuracy:			
Were serial dilutions analyzed and within control limits of ±10% for waters (± for 15% for soils) or initial sample result less than 50x MDL?		Yes	
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?		No	
Was post digestion spike criteria met (if applicable)?		Yes	
Was laboratory control sample criteria met?		Yes	
Was laboratory blank criteria met (within control limits)?		No	
Were ICV/CCV % recoveries within 90-110%?		Yes	
Were the Detection Limit PQL Standards within 70-130?		N/A	
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?		Yes	
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?		Yes	
Was the tune %RSD <5% ?		N/A	
Was internal standard criteria met?		N/A	
<u>Comments (note deviations):</u>			

Serial Dilution	Analyte	Initial Sample Result (mg/kg)	%D Acceptable	50 x MDL	Qualifier	Associated Samples
MS	Analyte Arsenic Lead	%R 3% -662%	Limits 75-125 75-125	Post Digestion % R 105% NR	Qualifier J/UJ None	Associated Samples All samples added
LCS	Analyte	%R Acceptable	Limits		Qualifier	Associated Samples
ICV/CCV	Analyte	%R Acceptable	Limits		Qualifier	Associated Samples
Blanks Prep Blank	Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.					
	Analyte	Result Nondetect	MDL/CRQL		Qualifiers	Associated Samples
ICB	Analyte	Result (ug/L) Nondetect	MDL/CRQL		Qualifier	Associated Samples
CCBs	Analyte	Result (ug/L)	MDL/CRQL		Qualifier	Associated Samples
CCB4	Arsenic	1.4	0.086 / 1.0		None	Sample results either nondetect or > CRQL
Field Blank	Analyte	Result	MDL/CRQL		Qualifier	Associated Samples
MemGym-Floor Mat Rinsate	Lead	0.22	0.13 / 1.0		None	Sample results either nondetect or > CRQL
MemGym-HV Floor Rinsate		Nondetect				
Modesty-Floor Mat Rinsate		Nondetect				
ICSA/AB	Analyte - Solution A	%R Acceptable	Found Sol. A / True A	CRQL	Qualifier	Associated Samples
CRQL Check N/A			%D		Qualifiers	Associated Samples
Tune N/A	Analyte	%RSD	Limits		Qualifier	Associated Samples
Internal Standard N/A	Standard / Element	%RI	Affected Analyte	Limits	Qualifier	Associated Samples
Initial Calibration %D (Form 15)	Analyte	%D Acceptable	Limits		Qualifier	Associated Samples

**Representativeness:**

Were sampling procedures and design criteria met?

Yes No N/A

Were holding times met?

Yes

Were preservation criteria met? (0 - 6°C)

Yes

Were Chain-of-Custody records complete and provided in data package?

No

Was the raw data present for drying logs, preparation logs, analytical instrument real-time printouts and laboratory bench sheets?

Yes

Were results less than MDL reported with a "U" and values less than the CRQLs but greater than MDL reported with a "J"?

Yes

Comments (note deviations):

Cooler temperature was 24°C. No qualification was required per guidelines and method.

Holding TimesAnalyteDays to Analysis

Acceptable

HT CriteriaQualifierAssociated Samples**Completeness (90%):**

Are all data in this SDG useable?

Yes No N/AComments (note deviations):

Yes

**Sensitivity:**

Are MDLs present and reported?

Yes No N/A

Do the reporting limits meet the project requirements?

Yes

Comments (note deviations):**Overall Comments:**

Data Validator:

Kristine Molloy

Date:

4/28/2018

Data Reviewer:

Cherie Zakowski

Date:

4/29/2018

**Anaconda School Sampling  
CLP Metals Data Validation Report**

Sample Delivery Group (SDG) Number: MH0AE0  
 Laboratory: Bonner Analytical  
 Matrix: Dust  
 Collection date: 3/25/2108 & 3/27/2108  
 Analysis/Methods: CLP Total Recoverable Metals - ICP AES (Arsenic and Lead)

Sample Number	CLP Number	Sample Number	CLP Number
Moodry-3rd Floor Hall	MH0AE0	JSHigh-Gnd Floor Hall	MH0AF0
Moodry-HV Floor Field Duplicate (D)	MH0AE1	JSHigh-1st Floor Rm 201	MH0AF1
JSHigh - Gnd Floor Main Door	MH0AE2	JSHigh-1st Floor Rm 207	MH0AF2
JSHigh-Gnd Floor Cafeteria Door	MH0AE3	JSHigh-1st Floor Library	MH0AF3
JSHigh - Gnd Floor door by BandRm	MH0AE4	JSHigh-1st Floor Hall	MH0AF4
JS HighFloor Mat Rinsate	MH0AE5	JSHigh-2nd Floor Rm 301	MH0AF5
JSHigh- HV Floor Rinsate	MH0AE6	JSHigh-2nd Floor Rm 308	MH0AF6
JSHigh-Gnd Floor Cafeteria	MH0AE7	JSHigh-2nd Floor Rm 312	MH0AF7
JSHigh-Gnd Floor Theater	MH0AE8	JSHigh-2nd Floor Hall	MH0AF8
JSHigh-Gnd Floor Band Room	MH0AE9	JSHigh- HV Flmat Field Duplicate (D)	MH0AF9

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017) .

**Metals**

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) ≤ 20% for water ≤35% for soils or within CRQL criteria?	Yes		
Are the laboratory duplicate RPDs ≤ 20% for water ≤35% for soils or within CRQL criteria?	Yes		
Are the matrix spike duplicates RPD ≤ 20%?	N/A		
<u>Comments (note deviations):</u>			

Field Duplicates	Sample	Duplicate	CRQL	RPD %	Qualifier	Associated Samples
	Moodry-2nd Floor Rm 22** MH0AD6	Moodry-HV Floor Field Duplicate (D) MH0AE1		Acceptable		
** Reported in SDG MH0AC0						
	JSHigh - Gnd Floor door by BandRm MH0AE4	JSHigh- HV Flmat Field Duplicate (D) MH0AF9		Acceptable		
MS/MSD N/A		%R	Limits	RPD %	Qualifiers	Associated Samples
LCSD N/A		%R	Limits	RPD %	Qualifiers	Associated Samples
Laboratory Duplicate	Sample	Duplicate	CRQL	RPD %	Qualifier	Associated Samples
				Acceptable		

<b>Accuracy:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Were serial dilutions analyzed and within control limits of $\pm 10\%$ for waters ( $\pm$ for 15% for soils) or initial sample result less than 50x MDL?	Yes		
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?	No		
Was post digestion spike criteria met (if applicable)?	No		
Was laboratory control sample criteria met?	Yes		
Was laboratory blank criteria met (within control limits)?	Yes		
Were ICV/CCV % recoveries within 90-110%?	Yes		
Were the Detection Limit PQL Standards within 70-130?			
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?	Yes		
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?	Yes		
Was the tune %RSD <5% ?	N/A		
Was internal standard criteria met?	N/A		
Comments (note deviations):			

Serial Dilution	Analyte	Initial Sample Result (mg/kg)	%D Acceptable	50 x MDL	Qualifier	Associated Samples
MS	Analyte Arsenic	%R 61%	Limits 75-125	Post Digestion % R 139%	Qualifier J/UJ	Associated Samples All samples
LCS	Analyte	%R Acceptable	Limits		Qualifier	Associated Samples
ICV/CCV	Analyte	%R Acceptable	Limits		Qualifier	Associated Samples
Blanks Prep Blank	Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.					
	Analyte	Result Nondetect	MDL/CRQL		Qualifiers	Associated Samples
ICB	Analyte	Result (ug/L) Nondetect	MDL/CRQL		Qualifier	Associated Samples
CCBs	Analyte	Result (ug/L) Nondetect	MDL/CRQL		Qualifier	Associated Samples
Field Blank	Analyte	Result Nondetect	MDL/CRQL		Qualifier	Associated Samples
JS HighFloor Mat Rinstate		Nondetect				
JSHigh- HV Floor Rinstate		Nondetect				
ICSA/AB	Analyte - Solution A	%R Acceptable	Found Sol. A / True A	CRQL	Qualifier	Associated Samples
CRQL Check N/A			%D		Qualifiers	Associated Samples
Tune N/A	Analyte	%RSD	Limits		Qualifier	Associated Samples
Internal Standard N/A	Standard / Element	%RI	Affected Analyte	Limits	Qualifier	Associated Samples

## Initial Calibration %D (Form 15)

Analyte%D  
AcceptableLimitsQualifier Associated Samples

## Representativeness:

Yes No N/A

Were sampling procedures and design criteria met?

Yes

Were holding times met?

Yes

Were preservation criteria met? (0 - 6°C)

No

Were Chain-of-Custody records complete and provided in data package?

Yes

Was the raw data present for drying logs, preparation logs, analytical instrument real-time printouts and laboratory bench sheets?

Yes

Were results less than MDL reported with a "U" and values less than the CRQLs but greater than MDL reported with a "J"?

Yes

Comments (note deviations):

Cooler temperature was 24°C. No qualification was required per guidelines and method.

Holding Times

AnalyteDays to Analysis  
AcceptableHT CriteriaQualifier Associated Samples

## Completeness (90%):

Yes No N/A

Are all data in this SDG usable?

Yes

Comments (note deviations):

## Sensitivity:

Yes No N/A

Are MDLs present and reported?

Yes

Do the reporting limits meet the project requirements?

Yes

Comments (note deviations):

## Overall Comments:

Data Validator:

Kristine Molloy

Date:

4/26/2018

Data Reviewer:

Cherie Zakowski

Date:

4/27/2018



**Anaconda School Sampling  
CLP Metals Data Validation Report**

Sample Delivery Group (SDG) Number: MH0AC0  
Laboratory: Bonner Analytical

Matrix: Dust  
Collection date: 3/26/2108 & 3/27/2108

Analysis/Methods: CLP Total Recoverable Metals - ICP AES (Arsenic and Lead)

<u>Sample Number</u>	<u>CLP Number</u>	<u>Sample Number</u>	<u>CLP Number</u>
Lincoln-2nd Floor Rm23	MH0AC0	Moodry-Gnd Floor Boys Locker Room	MH0AD0
Lincoln-2nd Floor Staff Lounge	MH0AC1	Moodry-Gnd Floor IT Lab	MH0AD1
Lincoln-2nd Floor Hall	MH0AC2	Moodry-1st Floor Stage	MH0AD2
Lincoln-Ada Gym Stage/Classroom	MH0AC3	Moodry-1st Floor Gym	MH0AD3
Lincoln-Ada Gym Ball Court	MH0AC4	Moodry-1st Floor Hall	MH0AD4
Lincoln - Floor Duplicate (D)	MH0AC5	Moodry-2nd Floor Rm 20	MH0AD5
Moodry-1st Floor Main Door	MH0AC6	Moodry-2nd Floor Rm 22	MH0AD6
Moodry-1st Floor South Door	MH0AC7	Moodry-2nd Floor Rm 25	MH0AD7
Moodry-HV Floor Rinsate	MH0AC8	Moodry-3rd Floor Rm 30	MH0AD8
Moodry-Gnd Floor Cafeteria	MH0AC9	Moodry-3rd Floor Rm 34	MH0AD9

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017) .

**Metals**

Precision:	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Are the field duplicate relative percent differences (RPD) $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?		Yes	
Are the laboratory duplicate RPDs $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?		Yes	
Are the matrix spike duplicates RPD $\leq$ 20%?		N/A	
<u>Comments (note deviations):</u>			

<u>Field Duplicates</u>	<u>Sample</u>	<u>Duplicate</u>	<u>CRQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
	Moodry-2nd Floor Rm 22 MH0AD6	Moodry-HV Floor Field Duplicate MH0AE1**		Acceptable		
	Lincoln-1st Floor Library++ MH0AB9	Lincoln - Floor Duplicate (D) MH0AC5		Acceptable		

\*\* Data reported in SDG MH0AE0

++ Data reported in SDG MH0AA7

<u>MS/MSD</u>	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
N/A					
<u>LCSD</u>	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
N/A					

<u>Laboratory Duplicate</u>	<u>Sample</u>	<u>Duplicate</u>	<u>CRQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
				Acceptable		

Accuracy:	Yes	No	N/A
Were serial dilutions analyzed and within control limits of $\pm 10\%$ for waters ( $\pm$ for 15% for soils) or initial sample result less than 50x MDL?	Yes		
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?	No		
Was post digestion spike criteria met (if applicable)?	Yes		
Was laboratory control sample criteria met?	Yes		
Was laboratory blank criteria met (within control limits)?	No		
Were ICV/CCV % recoveries within 90-110%?	Yes		
Were the Detection Limit PQL Standards within 70-130?	N/A		
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?	Yes		
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?	Yes		
Was the tune %RSD <5% ?	N/A		
Was internal standard criteria met?	N/A		

Comments (note deviations):

Serial Dilution	Analyte	Initial Sample Result (mg/kg)	%D Acceptable	50 x MDL	Qualifier	Associated Samples
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MS	Analyte	%R	Limits	Post Digestion % R	Qualifier	Associated Samples
	Arsenic	54%	75-125	24%	J- /UJ	All samples
	Lead	-152%	75-125	NR	None	Initial sample result > 4xs the spike added

LCS	Analyte	%R Acceptable	Limits	Qualifier	Associated Samples
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ICV/CCV	Analyte	%R Acceptable	Limits	Qualifier	Associated Samples
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Blanks Prep Blank	Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.					
	Result	MDL/CRQL	Qualifiers	Associated Samples		
	Nondetect					

ICB	Analyte	Result (ug/L) Nondetect	MDL/CRQL	Qualifier	Associated Samples
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CCBs	Analyte	Result (ug/L)	MDL/CRQL	Qualifier	Associated Samples
CCB4	Arsenic	1.4	0.086 / 1.0	None	Sample results > CRQL

Field Blank	Analyte	Result	MDL/CRQL	Qualifier	Associated Samples
Moodry-HV Floor Rinstate	Lead	0.25	0.13 / 1.0	None	Sample results either nondetect or > CRQL

ICSA/AB	Analyte - Solution A	%R Acceptable	Found Sol. A / True A	CRQL	Qualifier	Associated Samples
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CRQL Check N/A	%D	Qualifiers	Associated Samples
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Tune N/A	Analyte	%RSD	Limits	Qualifier	Associated Samples
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Internal Standard N/A	Standard / Element	%RI	Affected Analyte	Limits	Qualifier	Associated Samples
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## Initial Calibration %D (Form 15)

Analyte%D  
AcceptableLimitsQualifier Associated Samples

## Representativeness:

Yes No N/A

Were sampling procedures and design criteria met?

Yes

Were holding times met?

Yes

Were preservation criteria met? (0 - 6°C)

No

Were Chain-of-Custody records complete and provided in data package?

Yes

Was the raw data present for drying logs, preparation logs, analytical instrument real-time printouts and laboratory bench sheets?

Yes

Were results less than MDL reported with a "U" and values less than the CRQLs but greater than MDL reported with a "J"?

Yes

Comments (note deviations):

Cooler temperature was 24°C. No qualification was required per guidelines and method.

Holding Times

AnalyteDays to Analysis

Acceptable

HT CriteriaQualifierAssociated Samples

## Completeness (90%):

Yes No N/A

Are all data in this SDG usable?

Yes

Comments (note deviations):

## Sensitivity:

Yes No N/A

Are MDLs present and reported?

Yes

Do the reporting limits meet the project requirements?

Yes

Comments (note deviations):

## Overall Comments:

Data Validator:

Kristine Molloy

Date:

4/27/2018

Data Reviewer:

Cherie Zakowski

Date:

4/28/2018

Anaconda  
School XX  
Metals Data Validation Report

Sample Delivery Group (SDG) Number: SL2694  
 Laboratory: KATAHDIN Analytical Services  
 Matrix: Air Filter  
 Collection date: 3/24/2108 through 3/27/2108  
 Analysis/Methods: Metals - SW 6020

<u>Sample Number</u>	<u>Lab Number</u>	<u>Sample Number</u>	<u>Lab Number</u>
HEADST20	SL2694-1	LINCOLN25	SL2694-17
HEADST21	SL2694-2	LINCOLNPERSFIELDBLANK	SL2694-18
HEADST23	SL2694-3	MEMGYM20	SL2694-19
HEADST24	SL2694-4	MEMGYM21	SL2694-20
HEADST25	SL2694-5	MEMGYM23	SL2694-21
HEADSTPERFIELDBLANK	SL2694-6	MEMGYM24	SL2694-22
JSHIGH20	SL2694-7	MEMGYM25	SL2694-23
JSHIGH21	SL2694-8	MEMGYMPERSFIELDBLANK	SL2694-24
JSHIGH23	SL2694-9	MOODRY20	SL2694-25
JSHIGH24	SL2694-10	MOODRY21	SL2694-26
JSHIGH25	SL2694-11	MOODRY23	SL2694-27
JSHIGHPERSFIELDBLANK	SL2694-12	MOODRY24	SL2694-28
LINCOLN20	SL2694-13	MOODRY25	SL2694-29
LINCOLN21	SL2694-14	MOODRYPERSFIELDBLANK	SL2694-30
LINCOLN23	SL2694-15	PERSAIRLOTBLANK	SL2694-30
LINCOLN24	SL2694-16		

Data validation was performed in accordance with the specific analytical methods and the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA January 2017) .

Metals - SW 6020

Precision:	Yes	No	N/A
Are the field duplicate relative percent differences (RPD) $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?			N/A
Are the laboratory duplicate RPDs $\leq$ 20% for water $\leq$ 35% for soils or within CRQL criteria?			N/A
Are the matrix spike duplicates RPD $\leq$ 20%?			N/A
Are the laboratory control spike duplicates RPD $\leq$ 20%?			Yes
<u>Comments (note deviations):</u>			

Field Duplicates	<u>Sample</u>	<u>Duplicate</u>	<u>PQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
N/A						

MS/MSD	<u>%R</u>	<u>Limits</u>	<u>RPD %</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
N/A					

LCSD	<u>RPD %</u>	<u>Limits</u>	<u>Qualifiers</u>	<u>Associated Samples</u>
LCSOLD11IMS1	Acceptable			
LCSOLD11IMS2	Acceptable			

Laboratory Duplicate	<u>Sample</u>	<u>Duplicate</u>	<u>PQL</u>	<u>RPD %</u>	<u>Qualifier</u>	<u>Associated Samples</u>
N/A						

Accuracy:	Yes	No	N/A
Were serial dilutions analyzed and within control limits of $\pm 10\%$ for waters ( $\pm 15\%$ for soils) or initial sample result less than 50x MDL?			N/A
Was matrix spike criteria met (frequency 20% and % recovery 75-125%)?			N/A
Was post digestion spike criteria met (if applicable)?			N/A
Was laboratory control sample criteria met?			Yes
Was laboratory blank criteria met (within control limits)?			No
Were ICV/CCV % recoveries within 90-110%?			Yes
Were the Detection Limit PQL Standards within 70-130?			Yes
Was the %D on form 15-IN for the initial calibration instrument response and concentration data <30%?			N/A
Were ICSA/ICSAB % recoveries acceptable or within CRQL criteria?			Yes
Was the tune %RSD <5% ?			Yes
Was internal standard criteria met?			Yes

Comments (note deviations):

Serial Dilution	Analyte	Initial Sample Result	%D	50 x MDL	Qualifier	Associated Samples
N/A						

MS	Analyte	%R	Limits	Digestion	Qualifier	Associated Samples
N/A						

LCS	Analyte	%R	Limits	Qualifier	Associated Samples
LC2OLD11IMS1		Acceptable			
LC2OLD11IMS2		Acceptable			
LCSOLD11IMS1		Acceptable			
LCSOLD11IMS2		Acceptable			

ICV/CCV	Analyte	%R	Limits	Qualifier	Associated Samples
		Acceptable			

Blanks	Note: ICBs and Prep blanks are associated with all samples. Individual CCBs are associated with specific samples.				
Prep Blank		Result	MDL/PQL	Qualifiers	Associated Samples
PBSLD11IMS1	Lead	0.037	0.007 / 0.10	RL U	All samples with the exception of SL2694-025
PBSLD11IMS1	Lead	0.026	0.007 / 0.10		
ICB					
	Analyte	Result (ug/L)	MDL/PQL	Qualifier	Associated Samples
		Nondetect			
CCB					
	Analyte	Result (ug/L)	MDL/PQL	Qualifier	Associated Samples
CCB (4/13/18 16:10)	Lead	0.010 J	0.007 / 0.10	RL U	SL2694-027
CCB (4/13/18 16:56)	Lead	0.024 J	0.007 / 0.10	RL U	SL2694-027

Field Blank					
	Analyte	Result	MDL/PQL	Qualifier	Associated Samples
HEADSTPERSFIELD BLANK	Lead	0.031 J	0.007 / 0.10	RL U	SL2694-001 through SL2694-005
JSHIGHPERSFIELD BLANK	Lead	0.035 J	0.007 / 0.10	RL U	SL2694-007 through SL2694-011
LINCOLNPERSFIELD BLANK	Lead	0.035 J	0.007 / 0.10	RL U	SL2694-013 through SL2694-017
MEMGYMPERSFIELD BLANK	Lead	0.033 J	0.007 / 0.10	RL U	SL2694-019 through SL2694-023
MOODRYPERSFIELD BLANK	Lead	0.048 J	0.007 / 0.10	RL U	SL2694-026 through SL2694-029
PERSAIRLOT BLANK	Lead	0.051 J	0.007 / 0.10	RL U	All samples with the exception of SL2694-025

ICSA/AB	Analyte - Solution A	%R	Found Sol. A / True A	CRQL	Qualifier	Associated Samples
		Acceptable				

PQL Standard Check	%R	Qualifiers	Associated Samples
	Acceptable		

<u>Tune</u>	<u>Analyte</u>	<u>%RSD</u> Acceptable	<u>Limits</u>	<u>Qualifier</u>	<u>Associated Samples</u>
Internal Standard	<u>Standard / Element</u>	<u>%R</u> Acceptable	<u>Affected Analyte</u>	<u>Limits</u>	<u>Qualifier</u> <u>Associated Samples</u>
Initial Calibration %D (Form 15)	<u>Analyte</u>	<u>%D</u>	<u>Limits</u>	<u>Qualifier</u>	<u>Associated Samples</u>
N/A					

Representativeness:	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were sampling procedures and design criteria met?	Yes		
Were holding times met?	Yes		
Were preservation criteria met? (0 - 6°C)	N/A		
Were Chain-of-Custody records complete and provided in data package?	Yes		
Was the raw data present for drying logs, preparation logs, analytical instrument real-time printouts and laboratory bench sheets?	Yes		
Were results less than MDL reported with a "U" and values less than the CRQLs but greater than MDL reported with a "J"?	Yes		
<u>Comments (note deviations):</u>			
Cooler temperature is N/A			

<u>Holding Times</u>	<u>Analyte</u>	<u>Days to Analysis</u> Acceptable	<u>HT Criteria</u>	<u>Qualifier</u>	<u>Associated Samples</u>
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Completeness (90%):	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Are all data in this SDG useable?	Yes		
<u>Comments (note deviations):</u>			

Sensitivity:	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Are MDLs present and reported?	Yes		
Do the reporting limits meet the project requirements?	Yes		
<u>Comments (note deviations):</u>			

Overall Comments:

Data Validator: Kristine Molloy Date: 5/7/2018

Data Reviewer: Cherie Zakowski Date: 5/7/2018

## Appendix B

### Copies of Field Logbook Notes





*Rite in the Rain*  
ALL-WEATHER WRITING PAPER

Outdoor writing products •  
for Outdoor writing people



All components of  
this product are recyclable

[RiteintheRain.com](http://RiteintheRain.com)

*Rite in the Rain* is a patented, environmentally responsible,  
all-weather writing paper that sheds water and enables you  
to write anywhere, in any weather.

Using a pencil or all-weather pen, *Rite in the Rain* ensures that your  
notes survive the rigors of the field, regardless of the conditions.

8-305

# CDM Smith

ALL-WEATHER  
LOGBOOK

#01

CLIENT: EPA

PROJECT: Anaconda Dust  
Sampling

START DATE: 03/24/18

END DATE:

*Rite in the Rain*  
ALL-WEATHER WRITING PAPER

[illegible][illegible]

[illegible][illegible]

Date: 8/24/18 Author: N. Podolinsky  
 Project/Client: Anacanda Dust Sampling / EPA  
 Weather: AM - partly cloudy  
 PM -  
 Field Team: Nic Piscotta, Simon Wilson,  
 Ben Simpson, Nancy Podolinsky,  
 Connor Kelley, (Conn Smith), (Chas Ariss)  
 Activity: Dust Sampling (Anacanda  
 City)  
 Work Plan:  
 Equipment: HVS3 vacuum  
 micro Vac  
 H&S Issues: tripping on classroom stairs  
 PPE: Level D, Hard hats, eye protection  
 arrived at Headstart School 9:15am.  
 Unloaded equipment, toured the  
 school.  
 9:30am Chas Ariss arrived &  
 discussed school schedule & from  
 10am took Field lot Blank  
 MV sample for 250m 1 canister  
 ID: FL101 250m MV Field lot 48556  
 10:03 Field lot Blank  
 MV cassette 48556  
 FL 101 UP 3/24/18

Date: 8/24/18 Author: N. Podolinsky  
 Project/Client: Anacanda Dust Sampling / EPA  
 10:13am - Field lot Blank personal  
 air cassette 50909  
 ID: personal lot blank  
 10:15am - S. Wilson prepares personal  
 air, paperwork  
 10:16 N. Piscotta did air  
 calibrated all amp mps  
 10:35 B. Kelley & Ben Simpson  
 start the HV sampling  
 in the ground floor  
 refer to the (FS DS 2-  
 10:45 - Field lot sample 50182  
 MV lot Blank 50182  
 FL112  
 11:01 - personal air Headst. Field  
 ID: Blank Headst. Field Blank  
 11:05 - HV Field Blank  
 sand (HVS AND BLANK)  
 Headst. Field Blank, taken at  
 10:15 ID Headst. Field blank  
 FL117  
 11:11am Nic Piscotta started  
 MV sampling see (FS DS 2-  
 and 3/24/18

Date: 3/24/18 Author: Nancy Pedalino

Project/Client: Anaconda Dvst Sampling / EPA

Weather: AM - cloudy  
PM - cloudy

Field Team: Nic DiCrotta, Ben Simpson, Simon Wilson, Nancy Pedalino (Grms), Chas Arriss - city of Anaconda

Activity: Dvst Sampling

Work Plan:

Equipment: HUSB vacuum, ladder, Micro Vacuum, air mm pump

HAS Issues: classroom 1g air, ladder

PPE: level D except attic hatch w/

12:47 sample ID Headst HV Floor 007  
area was expanded to include the janitors closet and the Laundry room within the 1st Floor Children's Bathroom.  
After sampling on 3/24/18 the expanded areas their was only had .55 grams.  
The team decided to take a sample from the first floor lounge to replace  
MD 3/24/18

Date: 3/24/18 Author: Nancy Pedalino

Project/Client: Anaconda Dvst Sampling

HV Floor 007. The new sample ID: Headst HV Lounge  
Head Start Sheets (Floor FSDS)

Micro vacuum. Sample FSDS1-8

Personal Air Samples FSDS 1-6

HVS3 vacuum Samples FSDS 1-5

3:45 Chas Arriss, city of Anaconda recommended two opportunistic samples be collected. One by us inside the air duct in classroom on the ground level.  
ID: Headst MV Ogarb 001  
second opportunistic sample was from the ground level outside air intake, Utility Room  
ID: Headst MV Ogarb 002  
16:10 Nic DiCrotta did post calibration of personal air monitor samples. 4:30 left site.  
MD 3/24/18

Date: 3/25/18 Author: Nancy Podolinsky  
 Project/Client: Anaconda dust  
 Weather: AM - clear  
 PM -  
 Field Team: Ben Simpson, Connor Kelly, Nancy Podolinsky, Nic Pisciotto, Simon Wilson (CMM), Chas Arviss (City of Anaconda, Art Villaseca)  
 Activity: School dust sampling (school maint supervision)  
 Work Plan:  
 Equipment: Ladders, Pumps, HSV3 vacuum, MV vacuum  
 H&S Issues: trips, slips, Falls ladder  
 PPE: Level D, Level C for attic hatch  
 8:00am arrived at Anaconda High School. Ben Simpson, Simon Wilson, Connor Kelly, Nic Pisciotto & Nancy Podolinsky Setup in Room 200.  
 8:30 Team toured the school  
 8:45 collect Field Blank for MV cassette  
 ID: JS High MV Field Blank  
 9:50 Chas Arviss arrived on site  
 8:50 collected Field Blank for air monitoring cassette  
 WNP 3/25/18

Date: 3/25/18 Author: Nancy Podolinsky  
 Project/Client: Anaconda dust / EDA  
 ID: JS High Air Field Blank  
 9:50 Art Villaseca (School maint supervisor) arrived on site and tour w/ the CMM group & turned on lights throughout the building  
 9:15am team began sampling and recording on ESDS.  
 JS High ESDS sheets:  
 Micro-vacuum ESDS 1-10  
 HSV3 ESDS 1-7  
 Personal air monit ESDS 1-6  
 NOTE:  
 Deviations from the QAPP: The Floor mats were put in place on 3/19/2018 at all schools. After 4:00pm the mats were sampled and removed. The mats were sampled in place at all schools. Mats were taken after sampling and put into plastic bags.  
 WNP 3/25/18



Date: 3/25/18 Author: Nancy Foddy/ross  
 Project/Client: Anaconda Dust Sampling/SPR  
 Weather: AM - cloudy  
 PM - cloudy  
 see page 10 for team  
 10:14 Corn Smith team packed  
 up equipment.  
 Nic Pisciotha did  
 post calibrations on air  
 monitoring pumps.  
 Equipment: Sample JS High Mother 27  
 was not accessible due to  
 hatch was sealed. JS High  
 maintenance was contacted  
 but did not return the call.  
 left JS High School 3/25/18  
 10:14 As we packed up Art Villa-  
 senior contacted Simon Wilson  
 to access the ceiling hatch.  
 Simon Wilson sampled  
 JS High Mother 27.  
 10:45 Team left JS High School  
 in Palsburg  
 3/25/18

Date: 3/26/18 Author: Nancy Foddy/ross  
 Project/Client: Anaconda Dust Sampling/SPR  
 weather am clear pm  
 Field team: Connor Kelley, Simon Wilson, Nic Pisciotha,  
 Nancy Foddy/ross, Ben Simpson (Legion Sprinkler),  
 Chas Arriss, City of Anaconda, Art Villa Senior  
 Activity: School dust sampling (School)  
 - Tom Heather, school custodian, school nurse  
 work done:  
 Equipment: MV vacuum - ladder  
 HVS3 vacuum - air monitor pump  
 H&S: tips, clips, Falls Ladder  
 PPE: Level D, harness for airtight hatch  
 8:15 am arrived at Lincoln Elementary  
 and set up in Room 11. Chas Arriss  
 arrived at ~ 8:30 am.  
 8:30 am Nic Pisciotha set up air pump  
 for Corn Smith team.  
 8:45 am - Corn Smith team toured the  
 school with Chas Arriss & Art  
 Villa Senior  
 8:50 took Field Blank for personal  
 air monitoring  
 ID: Lincoln Elementary Field Blank  
 A. Foddy 3/26/18

Date:	3/24/18	Author:	Nancy Podolinsky
Project/Client:	Anacanda Dust Sampling / EPA		
Weather:	4:40 9:00am took the MV		
	Field Blank		
Field-Team:	1D: Lincoln MV Field Blank		
	9:10 COM Horn starts sampling - Refer to FSDS for info:		
Activities:	Lincoln FSDS		
Work-Plan:	note: Personal air sample sheet		
Equipment:	MV FSDS - 1-9 <small>continued with gym</small>		
	HSV3 FSDS - 1-6 <small>Gym</small>		
Notes:	Personal air Monit - 1-6		
3/23/18 13:30			
13:30	Left Lincoln School & headed to Memorial Gym		
13:35	arrived at Lincoln School & set up		
13:45			
13:50	Chas Arriss arrived onsite		
13:52	Field Blank for MV cassettes		
1D:	Mem Gym MV Field blank		
13:55	Person Field Blank sample		
1D:	Mem Gym 1D Field Blank		
14:05	Team toured thru gym		

AP 3/20/18

Date:	3/26/18	Author:	Nancy Podolinsky
Project/Client:	Anacanda School Dust Sampling / EPA		
14:10	sampling started		
Chas Arriss	showed Simon Wilson where he would like two opportunistic samples taken. (located on map)		
1D:	Mem Gym Ograb001 - Located concrete shift below vent.		
1D:	Mem Gym Ograb002 - SW Mens restroom		
Memorial Gym FSDS	note: personal monitoring are located on the Lincoln schools FSDS. (1-1)		
Micro Vacuum FSDS	1-5		
HSV3 FSDS	1-2		
16:02	stopped personal monit. pumps		
16:11	Left Memorial Gym		

Nancy Podolinsky  
3/26/18



Date: 3/27/18 Author: Nancy Podolins

Project/Client: Anacosta Dist. Sampling / EPA

Weather: AM cloudy cold  
PM.

Field Team: Nic Pisciotto, Simon Wilson, Corinne Vello,  
Ben Simpson, Nancy Podolins (room with)  
Art Villaseñor, Head maint. schools.

Activity: Roseville - Moody custodian  
Dust Sampling

Work Plan:

Equipment: HSS vacuum, ladders  
micro vacuum, personal pump

HSS Issues: sld tips, ladders

PPE: Level D, J, E, G, H, I, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

7:42 arrived at Moody School  
setup in Room 10.

8:00 personal pump (air) started

8:10 team toured Moody school

9:20 Personal Air Monitoring Sample  
Field Blank taken

ID: Moody Pers Field Blank

8:30 Chas Arviss arrived on site  
city of Anacosta

Podolins 3/27/18

Date: 3/27/18 Author: Nancy Podolins

Project/Client: Anacosta Dist. Sampling / EPA

8:30 Micro Vacuum Field Blank  
taken

ID: Moody MV Field Blank

8:30 team begins sampling  
Refer to FSDS

9:25 Charlie Coleman, EPA  
arrived on site

9:30 Press & TV crew arrived  
on site. Press & TV crew toured  
w/ Chas Arviss, Art Villaseñor,  
& Charlie Coleman.

10:45 Charlie Coleman, EPA  
left the site. 3/27/18 WF

11:00 tv crew & reporters left  
the site

11:00 Charlie Coleman request  
an opportunistic sample  
be taken of the lead paint  
on the floor of the Boiler Rm  
to Moody Ograb 004

11:05 Charlie Coleman left  
the site

NP 3/27/18

Date: 3/27/18 Author: Nancy Pochlinsky  
 Project/Client: Amacorda dust Sampling / EPA  
 Weather: All -  
 (18) Cloudy  
 Field Team: Chas Arvies request two opportunistic sample be taken from window cut out from 1st floor mens restroom.  
 ID: Moodry MV Ograb 001  
 Work Plan: 2nd sample requested from the 1st floor storage room.  
 Equipment: T. Beams  
 ID: Moodry MV Ograb 002  
 The com team decided to collect an opportunistic sample from the ground floor drop ceiling ID: Moodry MV Ograb 003.  
 The other sample as requested in the QAP will be from the Administration building.  
 ID: Admin Ograb 001

MP 3/27/18

Date: 3/27/18 Author: Nancy Pochlinsky  
 Project/Client: Amacorda Dust Sampling / EPA  
 As per Gannon & the grab samples (Moodry Ograb 001 & Admin Ograb) will be analyzed for  
 HSR3 FSDS 1-6  
 Microvacuum FSDS 1-  
 personal air monitoring FSDS 1-  
 14:00 Carl Lyman w/ county stopped by Moodry School & discussed sampling event at each school. Carl Lyman request com to sample on the 3rd floor vent Rm 34  
 ID: Moodry MV 005  
 Ograb  
 Art Villasenor & Carl Lyman also requested an opportunistic samples from 2nd floor Rm 25 Vent and 1st floor

MP 3/27/18

Nancy Rockwell

Project/Client: Anacorda dist. Samplings / EPA

~~Station~~ in Bm 17 ref

1051

Field-Team	Moody MV Carb 6.006
------------	---------------------

Moore M. E. 2007

15:15 air monitoring turned

Activity: off at 15:15 - Nic Astorta

did not air pump

Work Plan	Calcs
-----------	-------

Equipment: B:30pm COM Ham 6 ft

Madry School

**Abstract**



~~Ad 10~~

March  
3/27/18



## Summary

**Privacy/Client:**

*Rite in the Rain*  
ALL-WEATHER WRITING PAPER

Outdoor writing products  
for outdoor writing people



All components of  
this product are recyclable

[RiteintheRain.com](http://RiteintheRain.com)

*Rite in the Rain* is a patented, environmentally responsible,  
all-weather writing paper that dries when wet and enables you  
to write anywhere, in any weather.

Using a pencil or all-weather pen, *Rite in the Rain* ensures that your  
notes survive the rigors of the field, regardless of the conditions.

E-329

# CDM Smith

ALL-WEATHER  
LOGBOOK

# 01

CLIENT: EPA

PROJECT: Anaconda Dust  
Sampling

START DATE: 03/24/18

END DATE:

*Rite in the Rain*  
ALL-WEATHER WRITING PAPER

## Appendix C

### Copies of Field Sample Data Sheets



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6/7

Data Item	1	2	3
Sample ID <u>Lot 50609</u>	<u>Personal Lot Blank</u>	<u>Headstart Field Blank</u>	<u>Classroom 4</u>
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>NA</u>
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other <u>NA</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other <u>NA</u>
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA
Sample Type	FS <u>FB</u> LB Other _____	FS <u>FB</u> LB Other _____	FS <u>FB</u> LB Other _____
Personnel Information:			
ID <u>NA</u>	Name <u>NA</u>	Task <u>Lot Blank &amp; Field Blank</u>	
Sample Air Type	<u>NA</u> PA-EXC PA-TWA	<u>NA</u> PA-EXC PA-TWA	<u>NA</u> PA-EXC PA-TWA
Flow Meter Type	<u>NA</u> Rotameter DryCal	<u>NA</u> Rotameter DryCal	<u>NA</u> Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>NA</u>	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID			
Sample Air Start Date			
Sample Air Start Time			
Sample Air Start Flow (L/min)			
Sample Air Stop Date			
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	<u>No</u> NA Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by MP QC by \_\_\_\_\_

For Data Entry: Entered by \_\_\_\_\_ QC by \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart / Lincoln / Moodry / High / MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6

Data Item	1	2	3
Sample ID	<u>Headst 20</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, <u>HVS3 Floor</u> Other _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, <u>HVS3 Floor</u> Other _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, <u>HVS3 Floor</u> Other _____
Location Description (circle all that apply)	Basement, <u>Ground Floor</u> , <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other _____
Sample Venue	Indoor Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID <u>26</u>	Name <u>B. SIMON</u>	Task <u>SAMPLING</u>	
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA <u>6</u> Rotameter DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u>	(For Blanks "2" through "Pump ID" is "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827427</u>		<u>15</u>
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>10:37</u>		
Sample Air Start Flow (L/min)	<u>2.04</u>		
Sample Air Stop Date	<u>3/24/18</u>		
Sample Air Stop Time	<u>16:08</u>		
Sample Air Stop Flow (L/min)	<u>2.06</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>331</u>		
Sample Quantity (L)	<u>679</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v.032118

Lab: Kalamazoo

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: SW QC by: MP

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6

Data Item	1	2	3
Sample ID	<u>Headst21</u>		
Sampling Activities (circle all that apply)	<u>Surface, Ceiling Tile, Air Vent,</u> <u>Boiler Room, Light Fixture, Attic,</u> <u>HVS3 Floor</u> Other _____	<u>Surface, Ceiling Tile, Air Vent,</u> <u>Boiler Room, Light Fixture, Attic,</u> <u>HVS3 Floor</u> Other _____	<u>Surface, Ceiling Tile, Air Vent,</u> <u>Boiler Room, Light Fixture, Attic,</u> <u>HVS3 Floor</u> Other _____
Location Description (circle all that apply)	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> <u>Main Floor</u> Other _____	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> <u>Main Floor</u> Other _____	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> <u>Main Floor</u> Other _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID <u>21</u>	Name <u>S. Wilson</u>	Task <u>sampling</u>	
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u>	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827560</u>		
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>10:37</u>		
Sample Air Start Flow (L/min)	<u>2.05</u>		
Sample Air Stop Date	<u>3/24/18</u>		
Sample Air Stop Time	<u>16:08</u>		
Sample Air Stop Flow (L/min)	<u>1.91</u>		
Pump Fault	<u>(No)</u> NA Yes No NA Yes No NA Yes		
Sample Total Time (min)	<u>531</u>		
Sample Quantity (L)	<u>655</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

V 032116

Lab: Ketchikan

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: SW QC by: MP

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6

Data Item	1	2	3
Sample ID	<u>Headst 23</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, <u>HVS3 Floor</u> Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, <u>Ground Floor</u> , 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other: _____	FS FB LB Other: _____	FS FB LB Other: _____
Personnel Information:			
ID <u>23</u>	Name <u>C. KELLUM</u>		Task <u>SAMPLING</u>
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA <u>Rotameter</u> DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u>		
(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)			
Pump ID	<u>468063</u>		
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>10:37</u>		
Sample Air Start Flow (L/min)	<u>2.05</u>		
Sample Air Stop Date	<u>3/24/18</u>		
Sample Air Stop Time	<u>10:09</u>		
Sample Air Stop Flow (L/min)	<u>2.03</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>331</u>		
Sample Quantity (L)	<u>675</u>		
Field Comments			
Cassette Lot Number: (circle) <u>50609</u>			
Other: _____			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: SW QC by: JP

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart / Lincoln / Moodry / High / Memorial

Sampling Date: 3-24-18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 6

Data Item	1	2	3
Sample ID	<u>Headst 24</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other</u>
Location Description (circle all that apply)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor <u>Other</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor <u>Other</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor <u>Other</u>
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information: ID <u>24</u> Name <u>N. FISCHLOTTA</u> Task <u>SAMPLING</u>			
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u> (For blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>827549</u>		
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>10:37</u>		
Sample Air Start Flow (L/min)	<u>2.03</u>		
Sample Air Stop Date	<u>3/24/18</u>		
Sample Air Stop Time	<u>11:00</u>		
Sample Air Stop Flow (L/min)	<u>2.00</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>331</u>		
Sample Quantity (L)	<u>667</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Kataladin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: SW QC by: JP

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6

Data Item	1	2	3
Sample ID	<u>Headst 25</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>same as room</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, <u>Ground Floor</u> , 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other: _____	FS FB LB Other: _____	FS FB LB Other: _____
Personnel Information:			
ID: <u>25</u>	Name: <u>N. PODGUSKI</u>		Task: <u>Sampling</u>
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No: <u>50609</u>	Flow Meter ID: <u>11001</u>		
(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)			
Pump ID	<u>265042</u>		
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>10:37</u>		
Sample Air Start Flow (L/min)	<u>2.03</u>		
Sample Air Stop Date	<u>3/24/18</u>		
Sample Air Stop Time	<u>16:00</u>		
Sample Air Stop Flow (L/min)	<u>4.07</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>331</u>		
Sample Quantity (L)	<u>1010</u>		
Field Comments:			
Cassette Lot Number: (circle) <u>50609</u>			
Other: _____			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: SM QC by: SM

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial  
Other: \_\_\_\_\_Sampling Date: 3/24/18Field Logbook No.: 01Page No.: 7Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Nancy Podolinsky

Data Item	1	2	3
Sample ID	<u>HV Sand Blank</u>		
Location (e.g., room number, etc.)	<u>Head Start</u>		
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>NA</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, <u>Ground Floor</u> , 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>NA</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: <u>Silica Sand</u>	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS: D-(duplicate) RB-(rinse) <u>SB-(sand blank)</u>	FS: D-(duplicate) RB-(rinse) SB-(sand blank)	FS: D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	_____	_____	_____
Approximate Sample Area (circle units)	<u>NA</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>NA</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	_____ cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>NA</u>	_____	_____
Leak Check? (circle)	<u>No</u> Yes	No Yes	No Yes
20 sec cleaning @ end? (circle)	<u>No</u> Yes	No Yes	No Yes
Total Sample Time	<u>NA</u> minutes	_____ minutes	_____ minutes
Flow Drop	<u>NA</u> inches of water	_____ inches of water	_____ inches of water
Nozzle Drop	<u>NA</u> inches of water	_____ inches of water	_____ inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> 1213332 Other: _____	<u>11:05</u> <u>9.05 grams</u> <u>Silica</u>		

v 03211B

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: NA  
QC by: \_\_\_\_\_

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/24/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6-7Sampling Team: CDM Smith Other: \_\_\_\_\_Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	Headst HV Floor 004	Headst HV Floor 001	Headst HV Floor 002
Location (e.g., room number, etc.)	upstairs / 1st floor hallway	downstairs / ground floor hallway	Back door
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> : Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> : Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> : Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, <u>Ground Floor</u> , 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>split ground / 1st stairs</u>
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> <u>Tracked in Dirt</u> Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	NA	NA	NA
Approximate Sample Area (circle units)	80 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> ) <u>2.5 x 3.2 ft</u>	42 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	6 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	B	B	B
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	17 minutes	11 minutes	4 minutes
Flow Drop	5 inches of water	5 inches of water	5 inches of water
Nozzle Drop	10 inches of water	10 inches of water	10 inches of water
Field Comments	39.02 g = bottle tare weight 54.00 g = final weight Decon @ 10:30	39.12 g = bottle weight 47.58 g = final weight Decon @ 11:45	39.09 g = bottle weight 45.27 g = final weight Decon @ 12:45

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BS  
QC by: if

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/24/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 6 of 7Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): CONNIE KELLEY

Data Item	1	2	3
Sample ID	HEADST HV Floor 005	HEADST HV Floor 007	HEADST HV Floor 008
Location (e.g., room number, etc.)	CLASSROOM 3 1st Floor	1st Floor CHILDREN'S RESTROOM	LOWE'S FLOOR 1st Floor
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	<input checked="" type="radio"/> D-(duplicate) RB-(rinse) SB-(sand blank)	<input checked="" type="radio"/> D-(duplicate) RB-(rinse) SB-(sand blank)	<input checked="" type="radio"/> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	NA		
Approximate Sample Area (circle units)	65 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	168 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	129 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	A	A	A
Leak Check? (circle)	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes
20 sec cleaning @ end? (circle)	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes
Total Sample Time	13.5 minutes	23 minutes	25 minutes
Flow Drop	5 inches of water	5 inches of water	5 inches of water
Nozzle Drop	10 inches of water	10 inches of water	10 inches of water
Field Comments	START WEIGHT: 38.96 g END: 51.48 g START @ 1147 DECON @ 1030	DECON @ 1235 START WEIGHT: 38.95 START 1243 END 2950 INSUFFICIENT DUST - EXPANDED TO LAUNDRY ROOM & JANITARY CLOSET. STILL INSUFFICIENT DUST.	ADDED DUE TO INSUFFICIENT DUST @ HEADST HV FLOOR 007 START WEIGHT: 39.2 g END 45.41 g START 1351 DECON @ 1340
Bottle Lot Number: (circle)	1219265 1213332		
Other			

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: AK  
QC by: AK

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | Memorial

Sampling Date: 3/24/2018

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 647

Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	Headst HVF/mat0020	Headst HV Floor002	Headst HV Floor003
Location (e.g., room number, etc.)	Back door	Classroom 1	Class room 2
Sample Group (circle)	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: _____	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: <u>Tiles + rug</u>	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: <u>Tiles + rug</u>
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>split 2<sup>nd</sup>/3<sup>rd</sup> floor stairs</u>	Basement, <u>Ground Floor</u> , 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, <u>Ground Floor</u> , 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> <u>Tracked in Dirt</u> Other: _____	<u>Floor Dust</u> <u>Tracked in Dirt</u> Other: _____	<u>Floor Dust</u> <u>Tracked in Dirt</u> Other: _____
Category (circle)	FS <u>D-(duplicate)</u> RB-(rinse) SB-(sand blank)	<u>S</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>S</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	Headst HVF/mat002	NA	NA
Approximate Sample Area (circle units)	<u>6</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>210</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>240</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>4</u> minutes	<u>14</u> minutes	<u>15</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5-6</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u> Other: _____	39.24g = bottle weight 47.22g = final weight  Decon @ 13:20	39.16 = bottle weight 46.54 = final weight  Decon @ 13:55	39.14 = bottle weight 49.50 = final weight  Decon @ 14:45

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)

Completed by: BA  
QC by: dp

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: \_\_\_\_\_

Page No: \_\_\_\_\_

Sampling Team: QDM Smith Other: \_\_\_\_\_ Name(s): Connor Kueger, Ben Simpson

Data Item	1	2	3
Sample ID	<u>HEADST HV FLOOR DUST</u> <u>Henespace</u> <u>CLASROOM 4</u>	<u>HEADST HV FL MATR DUST</u>	<u>Head St HV F/m at Rinsate</u> <u>room 1</u>
Location (e.g., room number, etc.)	<u>1st Floor</u> <u>CLASROOM 4</u>	<u>6th Floor</u> <u>DOOR</u>	<u>N/A</u>
Sample Group (circle)	Bare Floor: Tile, <u>Laminate</u> , Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, <u>Floor Mat</u> Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> <u>Tracked in Dirt</u> Other: _____	Floor Dust Tracked in Dirt Other: <u>Rinsate Sand</u>
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>180</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>—</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>25</u> minutes	<u>10</u> minutes	<u>1</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>0</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>2</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u> Other: _____	<u>START WEIGHT: 39.00g</u> <u>END: 48.06g</u> <u>Decon @ 1430</u>	<u>STARTING WEIGHT: 39.01g</u> <u>END: 51.17g</u> <u>Decon @ 1535</u>	<u>38.78 = Start weight</u> <u>48.54 = End weight</u> <u>47.54 = weight after going through sample train</u>

V-032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: \_\_\_\_\_  
QC by: \_\_\_\_\_

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | Memorial  
Other: \_\_\_\_\_

Sampling Date: 3/25/18  
Field Logbook No: 01  
Page No: 10 of 11

Data Item	1	2	3
Sample ID	JS High <del>Flr</del> Blank Pers Field		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Field Blank</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>RM 209</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<input checked="" type="radio"/> Indoor <input type="radio"/> Outdoor <input type="radio"/> Both NA	<input type="radio"/> Indoor <input type="radio"/> Outdoor <input type="radio"/> Both NA	<input type="radio"/> Indoor <input type="radio"/> Outdoor <input type="radio"/> Both NA
Sample Type	FS <input checked="" type="radio"/> FB <input type="radio"/> LB Other: _____	FS <input type="radio"/> FB <input type="radio"/> LB Other: _____	FS <input type="radio"/> FB <input type="radio"/> LB Other: _____
Personnel Information: ID: _____ Name: <u>Field Air Blank</u> Task: _____			
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No.	Flow Meter ID	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID			
Sample Air Start Date			
Sample Air Start Time			
Sample Air Start Flow (L/min)			
Sample Air Stop Date			
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	No NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments	Field Blank		
Cassette Lot Number: (circle)	50609		
Other	_____		

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: <u>[Signature]</u> QC by: _____	For Data Entry: Entered by: _____ QC by: _____
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## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 1011

Data Item	1	2	3
Sample ID	J5 High 20		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HV83 Floor Other: <u>General Sample</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HV83 Floor Other:	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HV83 Floor Other:
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other:	FS FB LB Other:	FS FB LB Other:
Personnel Information:			
ID	Name <u>B. Simpson</u> Task:		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID: <u>11001</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868063</u>		
Sample Air Start Date	<u>3/25/18</u>		
Sample Air Start Time	<u>9:16</u>		
Sample Air Start Flow (L/min)	<u>2.03</u>		
Sample Air Stop Date	<u>3/25/18</u>		
Sample Air Stop Time	<u>1607</u>		
Sample Air Stop Flow (L/min)	<u>2.08</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>411</u>		
Sample Quantity (L)	<u>845</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50809</u>		
Other			

v-032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 104/1

Data Item	1	2	3
Sample ID	<u>JS High 21</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sample Air</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>21</u>	Name <u>S. Wilson</u>		Task _____
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID <u>11001</u>		
(For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)			
Pump ID	<u>827 560</u>		
Sample Air Start Date	<u>3/25/18</u>		
Sample Air Start Time	<u>9:16</u>		
Sample Air Start Flow (L/min)	<u>2.09</u>		
Sample Air Stop Date	<u>3/25/18</u>		
Sample Air Stop Time	<u>16:11</u>		
Sample Air Stop Flow (L/min)	<u>2.11</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>4:5</u>		
Sample Quantity (L)	<u>872</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50809</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry (High) Memorial

Sampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 1044

Data Item	1	2	3
Sample ID	JS High 23		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Substance Activities</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other:	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other:
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor <u>Outdoor</u> Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>23</u>	Name <u>C. Kelley</u>		Task _____
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No _____	Flow Meter ID <u>11001</u>		
(For Blanks "X" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)			
Pump ID	<u>827 427</u>		
Sample Air Start Date	<u>3/25/18</u>		
Sample Air Start Time	<u>9:16</u>		
Sample Air Start Flow (L/min)	<u>2.01</u>		
Sample Air Stop Date	<u>3/25/18</u>		
Sample Air Stop Time	<u>1607</u>		
Sample Air Stop Flow (L/min)	<u>2.04</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>411</u>		
Sample Quantity (L)	<u>832</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v. 032118

Lab: Katsalidis

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry (High) Memorial

Sampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 10 of 11

Data Item	1	2	3
Sample ID	<u>JS High 24</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other: Sampling Activities</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>Other</u>
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor <u>Other</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor <u>Other</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor <u>Other</u>
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID	<u>24</u> Name <u>N. Discioffa</u> Task _____		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID <u>11001</u> (For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>827549</u>		
Sample Air Start Date	<u>3/25/18</u>		
Sample Air Start Time	<u>9:16</u>		
Sample Air Start Flow (L/min)	<u>2.01</u>		
Sample Air Stop Date	<u>3/25/18</u>		
Sample Air Stop Time	<u>1607</u>		
Sample Air Stop Flow (L/min)	<u>2.03</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>411</u>		
Sample Quantity (L)	<u>830</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katschidin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10 + 11

Data Item	1	2	3
Sample ID	JS High 25		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	Indoor Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	FS FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID	Name <u>N. Podalinsky</u> Task _____		
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID <u>11001</u>		
(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)			
Pump ID	<u>868042</u>		
Sample Air Start Date	<u>3/25/18</u>		
Sample Air Start Time	<u>9:16</u>		
Sample Air Start Flow (L/min)	<u>2.00</u>		
Sample Air Stop Date	<u>3/25/18</u>		
Sample Air Stop Time	<u>1607</u>		
Sample Air Stop Flow (L/min)	<u>2.03</u>		
Pump Fault	(No) NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>411</u>		
Sample Quantity (L)	<u>828</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katakdin

Air Filter Diameter = 37mm; Pore Size = 0.6µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody (High) MemorialSampling Date: 3/25/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10 of 11Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	<u>JS High HV Floor 002</u>	<u>JS High HV Floor 002 D</u>	<u>JS High HV Floor 002</u>
Location (e.g., room number, etc.)	<u>Theater</u>	<u>Theater</u>	<u>North entrance (north west)</u>
Sample Group (circle)	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: _____	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: _____	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> <u>Multilevel, Shag, Floor Mat</u> Other: _____
Location Description (circle)	<u>Basement</u> <u>Ground Floor</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	<u>Basement</u> <u>Ground Floor</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	<u>Basement</u> <u>Ground Floor</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Splz Dr</u>
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> <u>D-(duplicate)</u> <u>RB-(rinse)</u> <u>SB-(sand blank)</u>	<u>FS</u> <u>D-(duplicate)</u> <u>RB-(rinse)</u> <u>SB-(sand blank)</u>	<u>FS</u> <u>D-(duplicate)</u> <u>RB-(rinse)</u> <u>SB-(sand blank)</u>
Sample Parent ID (if a duplicate sample)	<u>N/A</u>	<u>JS High HV Floor 002</u>	<u>N/A</u>
Approximate Sample Area (circle units)	<u>68</u> <u>30</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>30</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>7</u> minutes	<u>7</u> minutes	<u>2</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1219332</u> Other: _____	<u>38.73g = Bottle weight</u> <u>73.36g = Final weight</u> <u>Decon @ 0930</u>	<u>39.08g = Bottle weight</u> <u>66.98g = Final weight</u> <u>Decon @ 1005</u>	<u>38.84g = Bottle weight</u> <u>74.11g = Final weight</u> <u>Decon @ 1040</u>

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: Pat  
QC by: Pat

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 104 HSampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Carina Kueyer

Data Item	1	2	3
Sample ID	<u>JSHEGHVFLMAT003</u>	<u>JSHEGHVFLMAT003 D</u>	<u>JSHEGHVFLMAT003</u> <sup>Floor 003</sup> <del>CL003K</del>
Location (e.g., room number, etc.)	<u>Ground Floor BY</u> <u>Band Room</u>	<u>Ground Floor BY</u> <u>Band Room</u>	<u>2nd Floor Room 301</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust <u>Tracked in Dirt</u> Other: _____	Floor Dust <u>Tracked in Dirt</u> Other: _____	Floor Dust <u>Tracked in Dirt</u> Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	<u>NA</u>	<u>JSHEGHVFLMAT003</u> <sup>003</sup> <del>CL003K</del>	<u>NA</u>
Approximate Sample Area (circle units)	<u>6</u> <sup>cm<sup>2</sup></sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>5</u> <sup>cm<sup>2</sup></sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>150</u> <sup>cm<sup>2</sup></sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec. cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>3.5</u> minutes	<u>2.5</u> minutes	<u>20</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	<u>STARTING WEIGHT: 24.01g</u> <u>END: 114.21g</u>	<u>STARTING WEIGHT: 39.21g</u> <u>END: 98.02</u>	<u>STARTING WEIGHT: 39.12g</u> <u>END: 46.12</u>
Bottle Lot Number: (circle)	<u>1219755</u> <u>1213332</u>		
Other: _____	<u>Decon @ 0940</u>	<u>Decon @ 0958</u>	<u>Decon @ 1030</u>

V 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: Ch  
QC by: Ch

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | (High) MemorialSampling Date: 3/25/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 104 HSampling Team: (CDM Smith) Other: \_\_\_\_\_ Name(s): Be Simpson

Data Item	1	2	3
Sample ID	JSHigh HV Floor 002	JSHigh HV Floor 003	JSHigh HV Floor 004
Location (e.g., room number, etc.)	Cafeteria	Band room / 103	Hallway
Sample Group (circle)	<u>(Bare Floor)</u> Tile, Laminate, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	<u>(Bare Floor)</u> Tile, Laminate, Wood Carpet, Plush, Level Loop, Multilevel, Shag, <u>(Floor Mat)</u> Other: <u>Tile + small mat</u>	<u>(Bare Floor)</u> Tile, Laminate, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, <u>(Ground Floor)</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, <u>(Ground Floor)</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, <u>(Ground Floor)</u> 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	<u>(Floor Dust)</u> Tracked in Dirt Other: _____	<u>(Floor Dust)</u> Tracked in Dirt Other: _____	<u>(Floor Dust)</u> Tracked in Dirt Other: _____
Category (circle)	<u>(FS)</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>(FS)</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>(FS)</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	N/A
Approximate Sample Area (circle units)	<u>500</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>90</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>450</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>(Yes)</u>	No <u>(Yes)</u>	No <u>(Yes)</u>
20 sec cleaning @ end? (circle)	No <u>(Yes)</u>	No <u>(Yes)</u>	No <u>(Yes)</u>
Total Sample Time	<u>28</u> minutes	<u>8</u> minutes	<u>19</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u> Other: _____	38.89g = Bottle weight 46.14g = Final weight Decon @ 1120	39.10g = Bottle weight 54.03 = Final weight Decon @ 1230	38.94 = Bottle weight 47.94 = Final weight Decon @ 1300

V 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BK  
QC by: AK

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10 of 11Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Connor Kelley

Data Item	1	2	3
Sample ID	JSHIGH HV Floor 01	JSHIGH HV Floor 010	JSHIGH HV Floor 012
Location (e.g., room number, etc.)	2ND Floor RM 312	2ND Floor Room 308	2ND Floor HALL
Sample Group (circle)	Bare Floor: Tile, <u>Laminates</u> , Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, <u>Laminates</u> , Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, <u>Laminates</u> , Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, <u>2<sup>nd</sup> Floor</u> , 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, <u>2<sup>nd</sup> Floor</u> , 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, <u>2<sup>nd</sup> Floor</u> , 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	NA	NA	NA
Approximate Sample Area (circle units)	<u>120</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(12)</u>	<u>85</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(12)</u>	<u>104</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(12)</u>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No <u>YES</u>	No <u>YES</u>	No <u>YES</u>
20 sec cleaning @ end? (circle)	No <u>YES</u>	No <u>YES</u>	No <u>YES</u>
Total Sample Time	<u>26</u> minutes	<u>14</u> minutes	<u>14</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments  Bottle Lot Number: (circle) <u>4219265</u> <u>1213332</u>  Other: _____	STARTING WEIGHT: 29.1g END: 48.11g  Decon @ 1335	STARTING WEIGHT: 29.33g END: 47.56g  Decon @ 1325	STARTING WEIGHT: 38.9g END: 45.14g  Decon @ 1400

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10 of 11Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	JSHigh HV Floor Rinsate 001	JSHigh HV Floor Matt 001	JSHigh HV Floor Matt Rinsate 001
Location (e.g., room number, etc.)	N/A	"Main Entrance"	N/A
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>rinsate</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, <u>Floor Mat</u> Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>rinsate</u>
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>N/A</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Ground/1<sup>st</sup> Split</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>N/A</u>
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: <u>Rinsate</u>	Floor Dust <u>Tracked in Dirt</u> Other: _____	Floor Dust Tracked in Dirt Other: <u>Rinsate</u>
Category (circle)	FS D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)	FS D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)	FS D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	N/A
Approximate Sample Area (circle units)	<u>N/A</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>N/A</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>&lt;1</u> minutes	<u>3</u> minutes	<u>&lt;1</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>2</u> inches of water	<u>10</u> inches of water	<u>2</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u> Other: _____	39.17g = Bottle weight 48.46g = with silica 48.22g = Final weight Decom @ 1400	39.21g = Bottle weight 50.82g = Final weight Decom @ 1415	39.12g = Bottle weight 48.52g = with silica 48.38g = Final weight Decom @ 1455

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BS  
QC by: JS

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/2018

Other: \_\_\_\_\_

Field Logbook No: 91Page No: 10 of 11Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	JSHighHV Floor 005	JSHighHV Floor 007	
Location (e.g., room number, etc.)	Room 201	Library / room 204	
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: Tiles + small mat	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	
Approximate Sample Area (circle units)	65 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	45 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	_____ cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	B	B	
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	5 minutes	4.5 minutes	_____ minutes
Flow Drop	5 inches of water	5 inches of water	_____ inches of water
Nozzle Drop	10 inches of water	10 inches of water	_____ inches of water
Field Comments Bottle Lot Number: (circle) <u>1219785</u> 1213332 Other: _____	38.75g = Bottle weight 58.40g = Bottle weight Decom @ 1510	38.88g = Bottle weight 63.19g = Final weight Decom @ 1535	B8 3/25/18

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BS  
QC by: MD

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/25/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10 of 11Sampling Team: CDM Smith Other \_\_\_\_\_ Name(s): Connor KELLY

Data Item	1	2	3
Sample ID	<u>JS HIGH HV FLOOR 006</u>	<u>JS HIGH HV FLOOR 008</u>	
Location (e.g., room number, etc.)	<u>1ST FLOOR ROOM 207</u>	<u>1ST FLOOR HALLWAY</u>	
Sample Group (circle)	Bare Floor, Tile, Laminata, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other _____	Bare Floor, Tile, Laminata, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other _____	Bare Floor, Tile, Laminata, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other _____	Floor Dust Tracked in Dirt Other _____	Floor Dust Tracked in Dirt Other _____
Category (circle)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>98</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>190</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>190</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>21</u> minutes	<u>15</u> minutes	<u>1</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	<u>STARTING WEIGHT: 39.10g</u> <u>END: 45.91g</u>	<u>STARTING WEIGHT: 38.89g</u> <u>END: 51.12g</u>	
Bottle Lot Number: (circle)	<u>1219755</u> <u>1213332</u>		
Other	<u>Decon @ 1435</u>	<u>Decon @ 1530</u>	

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: Ch  
QC by: JP

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

**ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR**School: Headstart | Lincoln | Moodry | High | Memorial  
Other: \_\_\_\_\_Sampling Date: 3/24/18Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln pers field blank</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>NA</u>
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>NA</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>NA</u>	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>NA</u>
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA
Sample Type	FS <u>FB</u> LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID: _____	Name: <u>Field Blank</u>		Task: <u>Field Blank Dust Sampling</u>
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No: <u>50409</u>	Flow Meter ID: _____ (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID			
Sample Air Start Date	<u>3/24/18</u>		
Sample Air Start Time	<u>8:50</u>		
Sample Air Start Flow (L/min)			
Sample Air Stop Date			
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	No NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments:			
Cassette Lot Number: (circle)	<u>Field Blank</u>		
Other:			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: VP QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | Memorial

Other \_\_\_\_\_

Sampling Date: 3/26/18Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 20</u>	<u>Mem Gym 20</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>HV Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>20</u> Name <u>Ben Simson</u> Task <u>Dust Sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No	<u>50609</u> Flow Meter ID <u>11001</u> (For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868063</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.05</u>	<u>2.13</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>2.16</u>	<u>2.16</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>577</u>	<u>257</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature]QC by: [Signature]

For Data Entry: Entered by: \_\_\_\_\_

QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 21</u>	<u>Mem Gym 21</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>MV</u> Other <u>Sample</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>MV</u> Other <u>Sample</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information: <u>1-2</u>			
ID <u>21</u> <u>Robert</u> Name <u>Simon Wilson</u> Task <u>Dust Sampling</u>			
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>
Cassette Lot No	Flow Meter ID <u>11001</u>	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827560</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.04</u>	<u>2.03</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>1:48:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>1.98</u>	<u>1.99</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>551</u>	<u>241</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50603</u>		
Other			

V 032118

Lab: Katsahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: Sp QC by: Jul

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 23</u>	<u>memGym23</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>HV Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other:
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>23</u> Name <u>Connor</u>		Task <u>Sampling</u>
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>827427</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>1359</u>	
Sample Air Start Flow (L/min)	<u>2.04</u>	<u>2.09</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:18</u>	<u>1559</u>	
Sample Air Stop Flow (L/min)	<u>2.01</u>	<u>2.06</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>559</u>	<u>249</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature]QC by: [Signature]

For Data Entry: Entered by: \_\_\_\_\_

QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | Memorial

Sampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln24</u>	<u>MemGym24</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>MV sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>MV sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>24</u>	Name <u>Nic Pisciotto</u>	Task <u>dust sampling</u>	
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u>	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>027549</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.01</u>	<u>2.07</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>2.06</u>	<u>2.05</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>558</u>	<u>247</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katalidin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: CP QC by: SW

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart (Lincoln) Moodry High Memorial  
Other: \_\_\_\_\_Sampling Date: 3/26/18Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln25</u>	<u>memGym25</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sample Coord.</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sample Coord.</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>25</u> Name <u>Nancy Poddix</u> Task <u>dust sampling</u>			
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No. <u>50609</u> 3/26/18	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868042</u> →		
Sample Air Start Date	<u>3/26/18</u> →		
Sample Air Start Time	<u>8:42</u>	<u>1359</u>	
Sample Air Start Flow (L/min)	<u>2.07</u>	<u>2.15</u>	
Sample Air Stop Date	<u>3/26/18</u> →		
Sample Air Stop Time	<u>1316</u>	<u>1557</u>	
Sample Air Stop Flow (L/min)	<u>2.16</u>	<u>2.14</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>580</u>	<u>257</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 092118

Lab: Kalamazoo

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature] QC by: SW

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



**ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR**School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: \_\_\_\_\_

Data Item	1	2	3
Sample ID	<u>Memorial Field Blank</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	FS <u>FB</u> LB Other	FS FB LB Other	FS FB LB Other
Personnel Information: ID: <u>NA</u> Name: <u>Field Blank</u> Task: _____			
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID: _____ (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID			
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>13:55</u>		
Sample Air Start Flow (L/min)			
Sample Air Stop Date			
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	No <u>NA</u> Yes	No <u>NA</u> Yes	No <u>NA</u> Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments	<u>Field Blank</u>		
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: JP QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart (Lincoln) Moody | High | MemorialSampling Date: 3/26/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	<u>Lincoln HVF/mat003</u>	<u>Lincoln HVF floor 008</u>	<u>Lincoln HVF floor 007</u>
Location (e.g., room number, etc.)	<u>Gym entrance</u>	<u>Gym ball court</u>	<u>Gym stage/class</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, <u>Floor Mat</u> Other: _____	Bare Floor: Tile, Laminate <u>(Wood)</u> Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Ada Gym</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Ada Gym</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Ada Gym</u>
Matrix Type (circle)	Floor Dust <u>Tracked in Dirt</u> Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ( <u>ft<sup>2</sup></u> )	<u>300</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ( <u>ft<sup>2</sup></u> )	<u>110</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ( <u>ft<sup>2</sup></u> )
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>4</u> minutes	<u>19</u> minutes	<u>8</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>8</u> inches of water	<u>10</u> inches of water
Field Comments  Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u>  Other: _____	<u>39g = Bottle weight</u> <u>75.22g = Final bottle weight</u>  <u>Decon @ 0845</u>	<u>39.18g = Bottle weight</u> <u>49.02g = Final weight</u>  <u>Decon @ 0930</u>	<u>39.24 = Bottle weight</u> <u>70.27 = Final weight</u>  <u>Decon @ 1015</u>

v-032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BSS  
QC by: ✓

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/20/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): CONNOR KENNY

Data Item	1	2	3
Sample ID	<u>LEWIS HWY FLOOR 001</u>	<u>LEWIS HWY FLOOR 002</u>	<u>LEWIS HWY FLOOR 003</u>
Location (e.g., room number, etc.)	<u>1ST FLOOR ROOM 11</u>	<u>1ST FLOOR HALL</u>	<u>1ST FLOOR LIBRARY</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood <u>Carpet</u> , Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>70</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(F)</u>	<u>180</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(F)</u>	<u>83</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>(F)</u>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No <u>(Yes)</u>	No <u>(Yes)</u>	No <u>(Yes)</u>
20 sec cleaning @ end? (circle)	No <u>(Yes)</u>	No <u>(Yes)</u>	No <u>(Yes)</u>
Total Sample Time	<u>12.5</u> minutes	<u>15</u> minutes	<u>10</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	<u>STARTING WEIGHT: 39.11g</u> <u>END: 56.32g</u>	<u>STARTING WEIGHT: 39.06g</u> <u>END: 47.17g</u>	<u>STARTING WEIGHT: 39.00g</u> <u>END: 67.41g</u>
Bottle Lot Number: (circle)	<u>1219785</u> <u>1213332</u>		
Other: _____	<u>DECON @ 0900</u>	<u>DECON @ 0935</u>	<u>DECON @ 1025</u>

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: CK  
QC by: AK

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial  
Other \_\_\_\_\_

Sampling Date: 3/26/2018

Field Logbook No: 01

Page No: 13

Sampling Team: CDM Smith Other \_\_\_\_\_

Name(s): <sup>BB</sup>EPME Ben Simpson

Data Item	1	2	3
Sample ID	Lincoln HV Floor 002	Lincoln HV Floor 005	Lincoln HV Floor 006
Location (e.g., room number, etc.)	West entrance from hallway to playground	Staff Lounge	Hallway
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS D-(duplicate) RB-(rinseate) SB-(sand blank)	FS D-(duplicate) RB-(rinseate) SB-(sand blank)	FS D-(duplicate) RB-(rinseate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	N/A
Approximate Sample Area (circle units)	12 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	80 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	225 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	B	B	B
Leak Check? (circle)	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes
20 sec cleaning @ end? (circle)	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes	No <input checked="" type="radio"/> Yes
Total Sample Time	4 minutes	9 minutes	15 minutes
Flow Drop	5 inches of water	5 inches of water	5 inches of water
Nozzle Drop	10 inches of water	10 inches of water	5 inches of water
Field Comments Bottle Lot Number: (circle) 1219755 1213332 Other: _____	38.90g = Bottle weight 68.89g = Final weight Decan @ 1100	39.00g = Bottle weight 51.42g = Final weight Decan @ 1125	39.03g = Bottle weight 47.74g = Final weight Decan @ 1200



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13Sampling Team: QDM Smith Other: \_\_\_\_\_ Name(s): Connor Kelley

Data Item	1	2	3
Sample ID	<u>LINCOLN HV FLOOR RINSATE 003</u>	<u>LINCOLN HV FLOOR D 003</u>	<u>LINCOLN HV FLOOR 003</u>
Location (e.g., room number, etc.)	<u>LIBRARY</u> <u>032618</u> <u>N/A</u>	<u>LIBRARY</u>	<u>1ST FLOOR MAIN DOOR</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>N/A</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: <u>RINSATE</u>	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)		<u>LINCOLN HV FLOOR 003</u>	
Approximate Sample Area (circle units)	<u>NA</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup>	<u>80</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup>	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No Yes	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No Yes	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>&gt;1</u> minutes	<u>9</u> minutes	<u>3</u> minutes
Flow Drop	_____ inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	_____ inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	<u>STARTING WEIGHT: 39.06g</u> <u>W/LO CAT → 32.8g</u> <u>42.13g → 10g</u>	<u>STARTING WEIGHT: 39.16g</u> <u>END: 70.9g</u>	<u>STARTING WEIGHT: 39.14g</u> <u>END: 51.85g</u>
Bottle Lot Number: (circle)	<u>1219755</u> <u>1213332</u>		
Other	<u>Decon @ 1110</u>	<u>Decon @ 1125</u>	<u>Decon @ 1205</u>

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: CK  
QC by: AP

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13Sampling Team: ODM Smith Other: \_\_\_\_\_ Name(s): Connor Kelley

Data Item	1	2	3
Sample ID	<u>LINCOLN HVFLMAT RINATE002</u>	<u>LINCOLN HVFLMAT 004</u>	
Location (e.g., room number, etc.)	<u>NA</u>	<u>1ST FLOOR BR AMI DOOR</u>	
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>RINATE</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>RINATE</u>	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: <u>RINATE</u>	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)	FS D-(duplicate) RB-(rinstate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>NA</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	_____ cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>21</u> minutes	<u>4</u> minutes	_____ minutes
Flow Drop	<u>10</u> inches of water	<u>5</u> inches of water	_____ inches of water
Nozzle Drop	<u>2</u> inches of water	<u>10</u> inches of water	_____ inches of water
Field Comments	<u>STARTING WEIGHT: 39.13g</u> <u>w/o cap: 32.82g</u> <u>41.23</u> <u>whisker: 44.50</u> <u>&amp; cap</u>	<u>STARTING WEIGHT: 38.91g</u> <u>END 59.18g</u>	
Bottle Lot Number: (circle)	<u>1219758</u> 1213332		
Other	<u>DECON @ 12-18</u>	<u>DECON @ 12-35</u>	

v.032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

Far Field Team Completion  
(Initials)Completed by: CLP  
QC by: AP

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial  
Other: \_\_\_\_\_Sampling Date: 3/26/2018  
Field Logbook No.: 01  
Page No.: 13Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	<u>Lincoln HV Floor 004</u>		
Location (e.g., room number, etc.)	<u>Room 23</u>		
Sample Group (circle)	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> Multilevel, Shag, Floor Mat Other: _____	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> Multilevel, Shag, Floor Mat Other: _____	<u>Bare Floor: Tile, Laminate, Wood</u> <u>Carpet: Plush, Level Loop,</u> Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> Main Floor Other: _____	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> Main Floor Other: _____	<u>Basement, Ground Floor,</u> <u>1st Floor, 2nd Floor, 3rd Floor,</u> Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	<u>N/A</u>		
Approximate Sample Area (circle units)	<u>165</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>		
HVS3 Vacuum ID No.	<u>B</u>		
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time:	<u>6</u> minutes	_____ minutes	_____ minutes
Flow Drop	<u>5</u> inches of water	_____ inches of water	_____ inches of water
Nozzle Drop	<u>10</u> inches of water	_____ inches of water	_____ inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> 1213332 Other: _____	<u>39.10g = Bottle weight</u> <u>62.10g = Final weight</u> <u>Pecon @ 12.50</u>	<u>B8</u> <u>3/26/2018</u>	

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: B8  
QC by: JP

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | Memorial  
Other: \_\_\_\_\_

Sampling Date: 3/26/18

Field Logbook No: 01

Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 20</u>	<u>Mem Gym 20</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>HV Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other:
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other:
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>20</u> Name <u>Ben Simson</u> Task <u>Dust Sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No	<u>50609</u> Flow Meter ID <u>11001</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868063</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.05</u>	<u>2.13</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>2.16</u>	<u>2.16</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>577</u>	<u>257</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature] QC by: [Signature] For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | Memorial  
Other \_\_\_\_\_Sampling Date: 3/26/18Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 21</u>	<u>Mem Gym 21</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor <u>MV</u> Other <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>MV Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information: <u>1/8</u>			
ID <u>50603</u> Name <u>Simon Wilson</u>	Task <u>Dust Sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No	Flow Meter ID <u>11001</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>827560</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.04</u>	<u>2.03</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>9:09</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>1.98</u>	<u>1.99</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>551</u>	<u>241</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50603</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.6µm

For Field Team Completion: Completed by: [Signature] QC by: SW

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 23</u>	<u>memGym23</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Sample</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>HV Sample</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other _____	<u>FS</u> FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID <u>23</u>	Name <u>Connor</u>	Task <u>SAMPLING</u>	
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u>	(For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827427</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>1359</u>	
Sample Air Start Flow (L/min)	<u>2.04</u>	<u>2.09</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u> <u>NO 3/24/18</u>	<u>1559</u>	
Sample Air Stop Flow (L/min)	<u>2.01</u>	<u>2.06</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>559</u>	<u>249</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: CP QC by: 2

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | Memorial

Sampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln24</u>	<u>memGym24</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>MV sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>MV sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>24</u> Name <u>Nic Pisciotto</u> Task <u>dust sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette	(For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Lot No. <u>50609</u>	Flow Meter ID <u>11001</u>		
Pump ID	<u>827549</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.01</u>	<u>2.07</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>2.06</u>	<u>2.05</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>558</u>	<u>247</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature] QC by: SW

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart (Lincoln / Moody / High / Memorial)

Sampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 21

Page No: 13

Data Item	1	2	3
Sample ID	<u>Lincoln 25</u>	<u>mem Gym 25</u>	
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>SAMPLE COOR</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>SAMPLE COOR</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	<u>FS</u> FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>25</u>	Name <u>Nancy Poddix</u>		Task <u>dust sampling</u>
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u> (For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868042</u>		
Sample Air Start Date	<u>3/26/18</u>		
Sample Air Start Time	<u>8:42</u>	<u>13:59</u>	
Sample Air Start Flow (L/min)	<u>2.07</u>	<u>2.15</u>	
Sample Air Stop Date	<u>3/26/18</u>		
Sample Air Stop Time	<u>13:16</u>	<u>15:59</u>	
Sample Air Stop Flow (L/min)	<u>2.16</u>	<u>2.14</u>	
Pump Fault	<u>No</u> NA Yes	<u>No</u> NA Yes	No NA Yes
Sample Total Time (min)	<u>274</u>	<u>120</u>	
Sample Quantity (L)	<u>580</u>	<u>257</u>	
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: [Signature] QC by: SW

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



**ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR**School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/26/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: \_\_\_\_\_

Data Item	1	2	3
Sample ID	Mem Gym Pers Field Blank		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor <u>Outdoor</u> Both NA	Indoor Outdoor Both NA
Sample Type	FS <u>FB</u> LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information: ID: <u>NA</u> Name: <u>Field Blank</u> Task: _____			
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No: _____	(For Blanks "Z" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Flow Meter ID: _____			
Pump ID			
Sample Air Start Date	3/20/18		
Sample Air Start Time	13:55		
Sample Air Start Flow (L/min)			
Sample Air Stop Date			
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	No <u>NA</u> Yes	No <u>NA</u> Yes	No <u>NA</u> Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments	Field Blank		
Cassette Lot Number: (circle)	50509		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: JP QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/24/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 14Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Connor Kelley

Data Item	1	2	3
Sample ID	<u>MEMGYM HV Floor 003</u>	<u>MEMGYM Floor Rinsate 007</u>	<u>MEMGYM HV Floor 002</u>
Location (e.g., room number, etc.)	<u>1st Floor BALL COURT</u>	<u>RINSATE</u>	<u>END FLOOR SOUTH GYM</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, <u>Wood</u> Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>NA</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: <u>NA</u>	<u>03</u> Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: <u>RINSATE</u>	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) <u>RB</u> -(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)		<u><del>MEMGYM HV Floor 003</del></u> <u>CL 03208</u>	
Approximate Sample Area (circle units)	<u>180</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>~</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>50</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>14</u> minutes	<u>21</u> minutes	<u>6</u> minutes
Flow Drop	<u>5</u> inches of water	<u>7</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	<u>STARTING WEIGHT: 39.10</u> <u>END: 48.96g</u>	<u>STARTING</u>	<u>STARTING WEIGHT: 39.01g</u> <u>END: 54.13g</u>
Bottle Lot Number: (circle)	<u>1219756</u> <u>1213332</u>		
Other: _____	<u>DECON @ 1400</u>	<u>DECON @ 1505</u>	<u>DECON @</u>

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/26/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 3/24/18Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	Mem Gym HV Floor Mat 001	Mem Gym HV Floor Mat Rinsate 008	Mem Gym HV Floor 002
Location (e.g., room number, etc.)	West 6th St. entrance	N/A	Locker room A
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: Rinsate	Bare Floor: <u>Tile</u> Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, <u>Main Floor</u> Other: stairs between main/	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: Rinsate	<u>Basement</u> , Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust <u>Tracked in Dirt</u> Other: _____	Floor Dust Tracked in Dirt Other: <u>Stir in sand</u>	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	N/A
Approximate Sample Area (circle units)	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	N/A cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>350</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>4</u> minutes	<u>1</u> minutes	<u>14</u> minutes
Flow Drop	<u>5</u> inches of water	<u>10</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>20</u> inches of water	<u>8</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> 1213332 Other: _____	39g = Start weight 81.4g = Final weight Decon @ 1420	38.93g = Bottle weight 48.24g = Bottle w/ sand = Final weight Decon @ 1500	38.66g = Bottle weight 48.41g = Final weight Decon @ 1525

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 16

Data Item	1	2	3
Sample ID	Moodrypers Field Blank		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>NA</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	FS <u>FB</u> LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information:			
ID: <u>NA</u>	Name: <u>Field Blank</u>		Task: _____
Sample Air Type	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter DryCal	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No: <u>NA</u>	Flow Meter ID: <u>NA</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID			
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>8:00</u>		
Sample Air Start Flow (L/min)			
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time			
Sample Air Stop Flow (L/min)			
Pump Fault	No NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)			
Sample Quantity (L)			
Field Comments			
Cassette Lot Number: (circle)	<u>Field Blank</u>		
Other: _____			

v 032118

Lab: Kutahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 16

Data Item	1	2	3
Sample ID	<u>Moodry20</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>20 Name Ben Simpson Task Dust Sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No <u>50609</u>	Flow Meter ID <u>11001</u> (For blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>868063</u>		
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>8:00</u>		
Sample Air Start Flow (L/min)	<u>2.04</u>		
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time	<u>1515</u>		
Sample Air Stop Flow (L/min)	<u>2.12</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>45 + 407</u>		
Sample Quantity (L)	<u>247</u>		
Field Comments:			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Kalamazoo

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: JP QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 16

Data Item	1	2	3
Sample ID	<u>Moody 21</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID <u>21</u>	Name <u>Simon Wilson</u>	Task <u>Dist Sampling</u>	
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u>	(For blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827560</u>		
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>8:00</u>		
Sample Air Start Flow (L/min)	<u>2.08</u>		
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time	<u>1359</u>		
Sample Air Stop Flow (L/min)	<u>2.06</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>352</u>		
Sample Quantity (L)	<u>743 727</u>		
Field Comments	<u>4/1/18</u>		
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katakhdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: JP QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | Memorial

Sampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 16

Data Item	1	2	3
Sample ID	<u>Moodry 23</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other _____	FS FB LB Other _____	FS FB LB Other _____
Personnel Information: <u>3/27/18</u> ID: <u>23</u> Name: <u>Cameron Kelley</u> Task: <u>Dust Sampling</u>			
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No: <u>50609</u>	Flow Meter ID: <u>11001</u>	(For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>827427</u>		
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>08:18</u>		
Sample Air Start Flow (L/min)	<u>2.07</u>		
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time	<u>15:15</u>		
Sample Air Stop Flow (L/min)	<u>2.11</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>435 427</u>		
Sample Quantity (L)	<u>780 892</u>		
Field Comments	<u>3/27/18</u>		
Cassette Lot Number: (circle)	<u>50609</u>		
Other	_____		

v 032118

Lab: Katschlin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: AP

QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_

QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 16

Data Item	1	2	3
Sample ID	<u>Moody24</u>		
Sampling Activities (circle all that apply):	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other
Location Description (circle all that apply):	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other	FS FB LB Other	FS FB LB Other
Personnel Information:			
ID	<u>24</u> Name <u>Mr. Pisciotto</u> Task <u>Dust Sampling</u>		
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u> (For Blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)		
Pump ID	<u>827549</u>		
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>8:08</u>		
Sample Air Start Flow (L/min)	<u>2.02</u>		
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time	<u>13:59</u>		
Sample Air Stop Flow (L/min)	<u>2.02</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>351</u>		
Sample Quantity (L)	<u>709</u>		
Field Comments	<u>12/10</u>		
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: \_\_\_\_\_ QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_ QC by: \_\_\_\_\_



## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR PERSONAL AIR

School: Headstart | Lincoln | Moodry | High | MemorialSampling Date: 3/27/18

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 16

Data Item	1	2	3
Sample ID	<u>Moodry 25</u>		
Sampling Activities (circle all that apply)	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: <u>Sampling</u>	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____	Surface, Ceiling Tile, Air Vent, Boiler Room, Light Fixture, Attic, HVS3 Floor Other: _____
Location Description (circle all that apply)	<u>Basement</u> , Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Sample Venue	<u>Indoor</u> Outdoor Both NA	Indoor Outdoor Both NA	Indoor Outdoor Both NA
Sample Type	<u>FS</u> FB LB Other: _____	FS FB LB Other: _____	FS FB LB Other: _____
Personnel Information:			
ID	<u>25</u>	Name	<u>Nancy Podolinsky</u> Task <u>Dust Sampling</u>
Sample Air Type	NA PA-EXC <u>PA-TWA</u>	NA PA-EXC PA-TWA	NA PA-EXC PA-TWA
Flow Meter Type	NA Rotameter <u>DryCal</u>	NA Rotameter DryCal	NA Rotameter DryCal
Cassette Lot No. <u>50609</u>	Flow Meter ID <u>11001</u>	(For blanks "2" through "Pump ID" to "Sample Air Stop Flow" then circle NA for "Pump Fault" & enter 0 for Total Time & Quantity)	
Pump ID	<u>868042</u>		
Sample Air Start Date	<u>3/27/18</u>		
Sample Air Start Time	<u>0808</u>		
Sample Air Start Flow (L/min)	<u>2.09</u>		
Sample Air Stop Date	<u>3/27/18</u>		
Sample Air Stop Time	<u>1515</u>		
Sample Air Stop Flow (L/min)	<u>2.15</u>		
Pump Fault	<u>No</u> NA Yes	No NA Yes	No NA Yes
Sample Total Time (min)	<u>455</u> <u>427</u>		
Sample Quantity (L)	<u>905</u>		
Field Comments			
Cassette Lot Number: (circle)	<u>50609</u>		
Other			

v 032118

Lab: Katahdin

Air Filter: Diameter = 37mm; Pore Size = 0.8µm

For Field Team Completion: Completed by: JP

QC by: \_\_\_\_\_

For Data Entry: Entered by: \_\_\_\_\_

QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/27/2018

Other: \_\_\_\_\_

Field Logbook No: #601Page No: 160Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	<u>Moody HVF/Mat002</u>	<u>Moody HVF/Mat Rinsate 10</u>	<u>Moody HV Floor 002</u>
Location (e.g., room number, etc.)	<u>South Door</u>	<u>N/A</u>	<u>Cafeteria</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, <u>Floor Mat</u> Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: <u>Rinsate</u>	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1<sup>st</sup> Floor</u> , 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>Rinsate</u>	<u>Basement</u> , Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust <u>Tracked in Dirt</u> Other: _____	Floor Dust Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) <u>RB-(rinsate)</u> SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Approximate Sample Area (circle units)	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>N/A</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>230</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>4</u> minutes	<u>11</u> minutes	<u>28</u> minutes
Flow Drop	<u>5</u> inches of water	<u>10</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>2</u> inches of water	<u>8</u> inches of water
Field Comments  Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u>  Other: _____	<u>38.94g = Bottle weight</u> <u>48.30g = Final weight</u>  <u>Decon @ 0805</u>	<u>38.90g = Bottle weight</u> <u>48.10g = w/silica</u> <u>47.90g = Final weight</u>  <u>Decon @ 0850</u>	<u>38.82g = Bottle weight</u> <u>50.37g = Final weight</u>  <u>Decon @ 925</u>

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)Completed by: BS  
QC by: AS

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial  
Other: \_\_\_\_\_

Sampling Date: 3/27/18  
Field Logbook No: 01  
Page No: 160

Sampling Team: ODM Smith Other: \_\_\_\_\_ Name(s): Connor Kelley

Data Item	1	2	3
Sample ID	MOODY HV FLOOR 01	MOODY HV FLOOR 10	MOODY HV FLOOR 011
Location (e.g., room number, etc.)	1ST FLOOR MAIN DOOR	3RD FLOOR RM 30	3RD FLOOR RM 34
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, <u>Floor Mat</u> Other: _____	Bare Floor: Tile, <u>Laminate</u> , Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, <u>Laminate</u> , Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1st Floor</u> , 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, <u>3rd Floor</u> , Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, <u>3rd Floor</u> , Main Floor Other: _____
Matrix Type (circle)	Floor Dust <u>Tracked in Dirt</u> Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	<u>12</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>12</u>	<u>55</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>55</u>	<u>130</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>130</u>
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	<u>A</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>4.5</u> minutes	<u>15</u> minutes	<u>2.8</u> minutes
Flow Drop	<u>5</u> inches of water	<u>6</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>10</u> inches of water
Field Comments	STARTING WEIGHT: 38.75g END: 174.5g Decomp @ 0830	STARTING WEIGHT: 39.15g END: 95.75g Decomp @ 0905	STARTING WEIGHT: 38.92g END: 45.45g Decomp @ 0945
Bottle Lot Number: (circle)	<u>1219755</u> 1213332		
Other			

v 032116

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)

Completed by: CK  
QC by: AK

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | (Moody) | High | MemorialSampling Date: 3/27/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 160Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	Moody HV Floor 002	Moody HV Floor 003	Moody HV Floor 004
Location (e.g., room number, etc.)	Boys Locker Room	Computer/IT Lab	Stage
Sample Group (circle)	<u>Bare Floor</u> Tile, <u>Laminate</u> , Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	<u>Bare Floor</u> Tile, Laminate, Wood Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	<u>Bare Floor</u> Tile, Laminate, <u>Wood</u> Carpet, Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	<u>Basement</u> Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	<u>Basement</u> Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	<u>Basement</u> Ground Floor, <u>1<sup>st</sup> Floor</u> 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	N/A	N/A	N/A
Approximate Sample Area (circle units)	<u>500</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>50</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>	<u>100</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>0</u>	<u>B</u>	<u>B</u>
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>24</u> minutes	<u>6</u> minutes	<u>11</u> minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	<u>5</u> inches of water
Nozzle Drop	<u>9</u> inches of water	<u>10</u> inches of water	<u>8</u> inches of water
Field Comments Bottle Lot Number: (circle) <u>1219755</u> <u>1213332</u> Other: _____	39.06 = Bottle weight 48.53 = Final weight Decon @ 1050	38.94 = Bottle weight 54.18 = Final weight Decon @ 1150	38.94 = Bottle weight 80.43 = Final weight Decon @ 1225

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials):Completed by: BS  
QC by: JP

For Data Entry:

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_



# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial  
Other: \_\_\_\_\_

Sampling Date: 3/27/19  
Field Logbook No: 01  
Page No: 16

Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): CORINNE KELLEY

Data Item	1	2	3
Sample ID	MOODY HV FLOOR 012	MOODY HV FLOOR 009	MOODY HV FLOOR 007
Location (e.g., room number, etc.)	3RD FLOOR HALL	2ND FLOOR Room 25	2ND FLOOR Room 20
Sample Group (circle)	Bare Floor: Tile, Laminates, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminates, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminates, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____	Basement, Ground Floor, 1st Floor, 2nd Floor, 3rd Floor, Main Floor Other: _____
Matrix Type (circle)	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)	FS D-(duplicate) RB-(rinse) SB-(sand blank)
Sample Parent ID (if a duplicate sample)			
Approximate Sample Area (circle units)	270 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <input checked="" type="radio"/>	120 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <input checked="" type="radio"/>	125 cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <input checked="" type="radio"/>
HVS3 Vacuum ID No.	A	A	A
Leak Check? (circle)	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>
20 sec cleaning @ end? (circle)	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>	No <input checked="" type="radio"/> Yes <input checked="" type="radio"/>
Total Sample Time	23 minutes	12 minutes	15 minutes
Flow Drop	5 inches of water	5 inches of water	5 inches of water
Nozzle Drop	10 inches of water	10 inches of water	10 inches of water
Field Comments	STARTING WEIGHT: 39.0g END: 47.12g  DECON @ 1105	STARTING WEIGHT: 38.9g END: 45.47  DECON @ 1155	STARTING WEIGHT: 39.0g END: 47.0g  DECON @ 1225
Bottle Lot Number: (circle)	1219755 1213332		
Other			

v 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)

Completed by: AK  
QC by: AK

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

# ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | Memorial

Sampling Date: 6/27/18

Other: \_\_\_\_\_

Field Logbook No: 01

Page No: 16

Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Conrad Kewer

Data Item	1	2	3
Sample ID	<u>MOODY HV FLOOR 008</u>	<u>MOODY HV FLOOR 008</u>	<u>MOODY HV FLOOR 008</u>
Location (e.g., room number, etc.)	<u>2ND FLOOR</u> <u>Room 22</u>	<u>2ND FLOOR</u> <u>Room 22</u>	<u>N/A</u>
Sample Group (circle)	Bare Floor: Tile, Laminate, Wood Carpet: <u>Plush</u> , Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: <u>Plush</u> , Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: <u>Plush</u> , Level Loop, Multilevel, Shag, Floor Mat Other: <u>N/A</u>
Location Description (circle)	Basement, Ground Floor, 1 <sup>st</sup> Floor, <u>2<sup>nd</sup> Floor</u> , 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, <u>2<sup>nd</sup> Floor</u> , 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: <u>REINSTATE</u>
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: <u>REINSTATE</u>
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinstate) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinstate) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinstate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)		<u>MOODY HV FLOOR 008</u>	
Approximate Sample Area (circle units)	<u>60</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>65</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )	<u>N/A</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> (ft <sup>2</sup> )
HVS3 Vacuum ID No.	<u>A</u>	<u>A</u>	
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No <u>Yes</u>
Total Sample Time	<u>7</u> minutes	<u>6.5</u> minutes	<u>7.1</u> minutes
Flow Drop	<u>8</u> inches of water	<u>8</u> inches of water	<u>8</u> inches of water
Nozzle Drop	<u>10</u> inches of water	<u>10</u> inches of water	<u>2</u> inches of water
Field Comments	<u>STARTING WEIGHT: 38.94g</u> <u>END: 57.60</u>	<u>STARTING WEIGHT: 38.50g</u> <u>END: 79.94g</u>	<u>STARTING WEIGHT: 38.50g</u> <u>END: 79.94g</u>
Bottle Lot Number: (circle)	<u>1219758</u> <u>1213332</u>		
Other	<u>Decon @ 1310</u>	<u>Decon @ 1335</u>	

V 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials)

Completed by: Ch  
QC by: Ch

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## ANACONDA FIELD SAMPLE DATA SHEET (FSDS) FOR HVS3 FLOOR DUST

School: Headstart | Lincoln | Moody | High | MemorialSampling Date: 3/27/2018

Other: \_\_\_\_\_

Field Logbook No: 01Page No: 10Sampling Team: CDM Smith Other: \_\_\_\_\_ Name(s): Ben Simpson

Data Item	1	2	3
Sample ID	<u>Moody HV Floor 005</u>	<u>Moody HV Floor 006</u>	
Location (e.g., room number, etc.)	<u>bym</u>	<u>Hallway</u>	
Sample Group (circle)	Bare Floor: Tile, Laminate, <u>Wood</u> Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: <u>Tile</u> , Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____	Bare Floor: Tile, Laminate, Wood Carpet: Plush, Level Loop, Multilevel, Shag, Floor Mat Other: _____
Location Description (circle)	Basement, Ground Floor, <u>1<sup>st</sup> Floor</u> , 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, <u>1<sup>st</sup> Floor</u> , 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____	Basement, Ground Floor, 1 <sup>st</sup> Floor, 2 <sup>nd</sup> Floor, 3 <sup>rd</sup> Floor, Main Floor Other: _____
Matrix Type (circle)	<u>Floor Dust</u> Tracked in Dirt Other: _____	<u>Floor Dust</u> Tracked in Dirt Other: _____	Floor Dust Tracked in Dirt Other: _____
Category (circle)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	<u>FS</u> D-(duplicate) RB-(rinsate) SB-(sand blank)	FS D-(duplicate) RB-(rinsate) SB-(sand blank)
Sample Parent ID (if a duplicate sample)	<u>N/A</u>	<u>N/A</u>	
Approximate Sample Area (circle units)	<u>210</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>ft<sup>2</sup></u>	<u>110</u> cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> <u>ft<sup>2</sup></u>	_____ cm <sup>2</sup> m <sup>2</sup> in <sup>2</sup> ft <sup>2</sup>
HVS3 Vacuum ID No.	<u>B</u>	<u>B</u>	
Leak Check? (circle)	No <u>Yes</u>	No <u>Yes</u>	No Yes
20 sec cleaning @ end? (circle)	No <u>Yes</u>	No <u>Yes</u>	No Yes
Total Sample Time	<u>15</u> minutes	<u>13</u> minutes	_____ minutes
Flow Drop	<u>5</u> inches of water	<u>5</u> inches of water	_____ inches of water
Nozzle Drop	<u>9</u> inches of water	<u>9</u> inches of water	_____ inches of water
Field Comments Bottle Lot Number: (circle) <u>1219759</u> 1213332 Other: _____	<u>39.09 = Bottle weight</u> <u>61.54 = Final weight</u> <u>Decom @ 1300</u>	<u>39.08 = Bottle weight</u> <u>49.36 = Final weight</u> <u>Decom @ 1340</u>	<u>B8</u> <u>3/27/2018</u>

V 032118

Lab: CLP

Container: HVS3 Catch Bottle = 250 mL LDPE

For Field Team Completion  
(Initials):Completed by: BS  
QC by: BS

For Data Entry

Entered by: \_\_\_\_\_  
QC by: \_\_\_\_\_

## Appendix D

### Building Layouts Showing Sample Locations





# Fire Evaluation Route

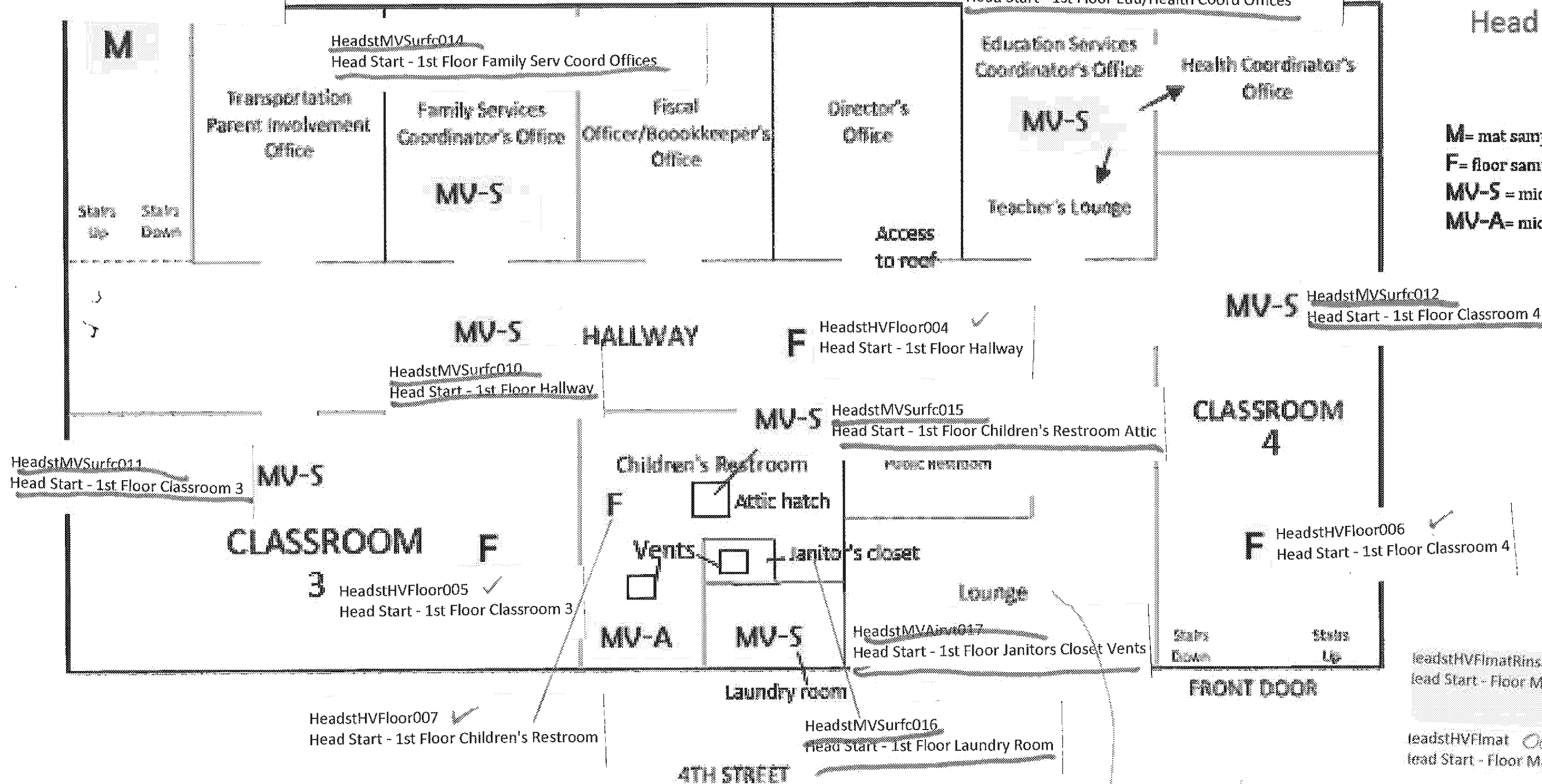
TURN OFF LIGHTS, CLOSE WINDOWS AND DOORS UPON LEAVING

HeadstHVFlmat002 ✓  
Head Start - 1st Floor Back Door

HeadstMVSurf013  
Head Start - 1st Floor Edu/Health Coord Offices

## Head Start – 1st Floor

**M**= mat samples by HVS3 high-velocity vacuum (1)  
**F**= floor samples by HVS3 high-velocity vacuum (4)  
**MV-S** = micro-vacuum surface samples (7)  
**MV-A**= micro-vacuum- air vents (1)



Headst HV Lounge ✓  
added due to lack of HV007 sample

leadstHVFlmatRinsate001  
lead Start - Floor Mat Rinsate ✓

leadstHVFlmat 002 D  
lead Start - Floor Mat Duplicate (D) ✓

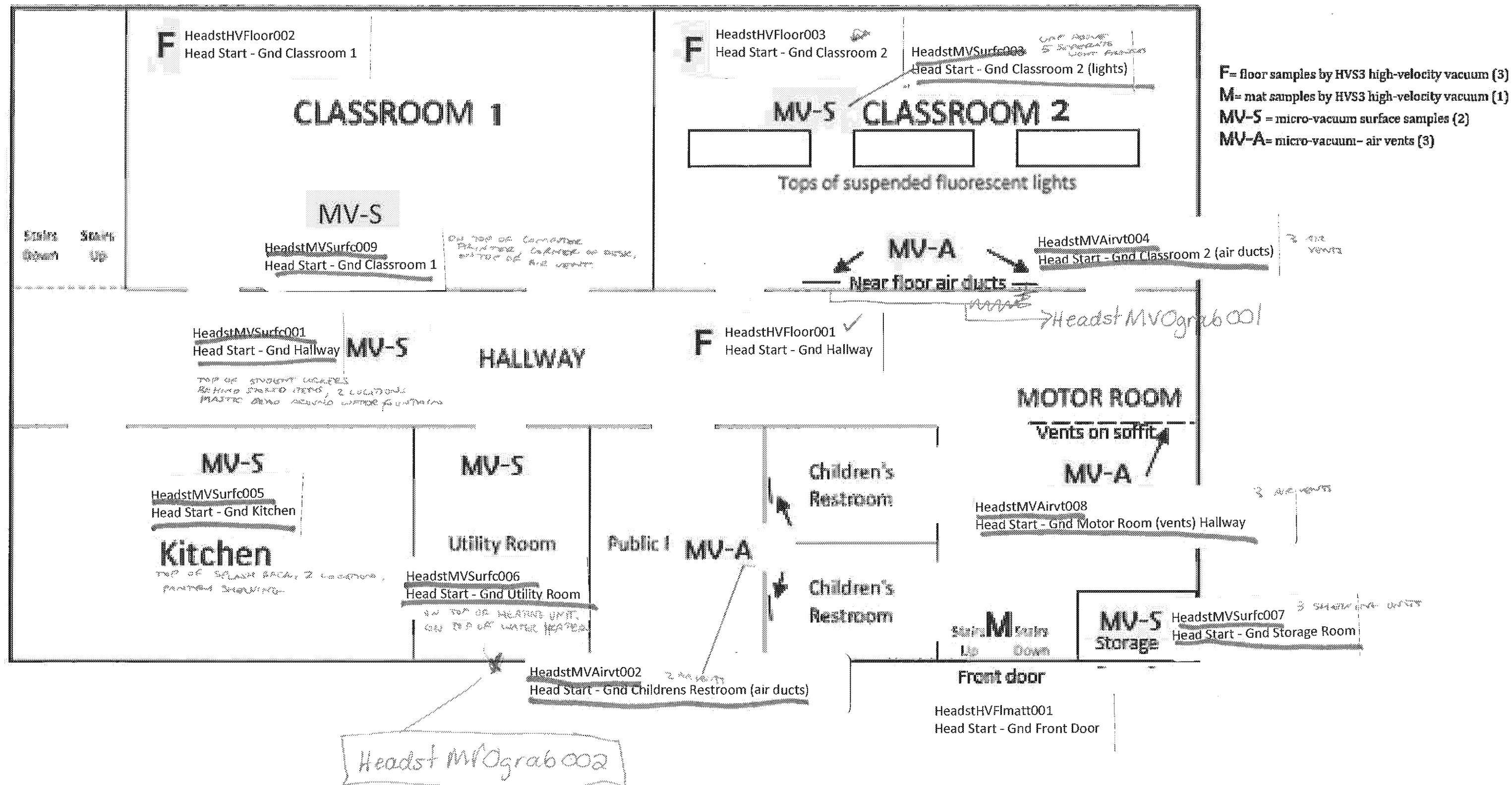
leadstMVSurf 004 D  
lead Start MV Field Duplicate (D) ✓

# Fire Evacuation Route

TURN OFF LIGHTS, CLOSE WINDOWS AND DOORS UPON LEAVING

## Head Start – Ground Floor

Back Door

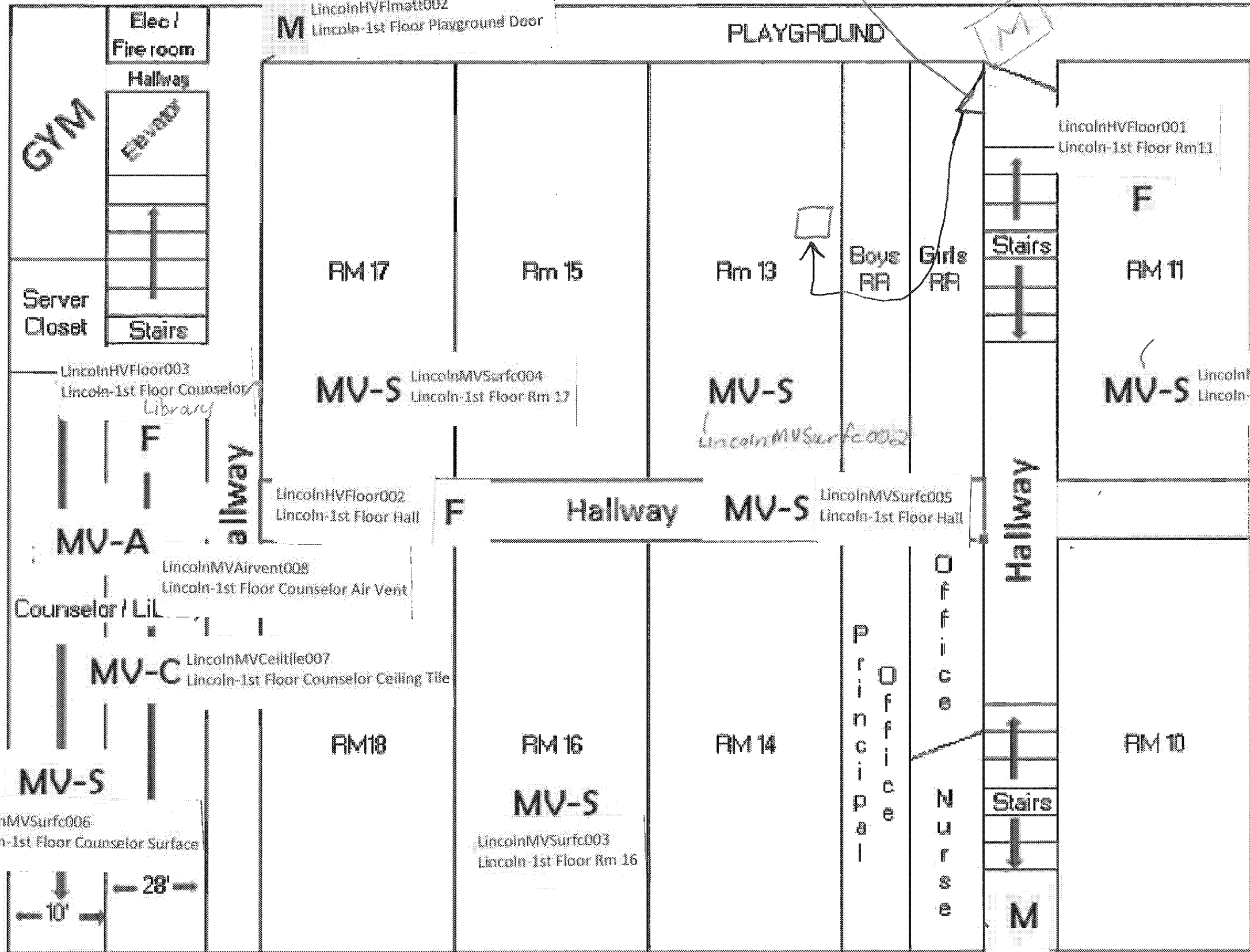


Basement heating System  
Lincoln MV Ograb002

Lincoln HV Floor 004

# Lincoln Elementary – 1<sup>st</sup> Floor

- F** = floor samples by HVS3 high-velocity vacuum (3)
- M** = mat samples by HVS3 high-velocity vacuum (1)
- MV-S** = micro-vacuum surface samples (6)
- MV-C** = micro-vacuum – top of ceiling tiles (1)
- MV-A** = micro-vacuum – air vents (1)



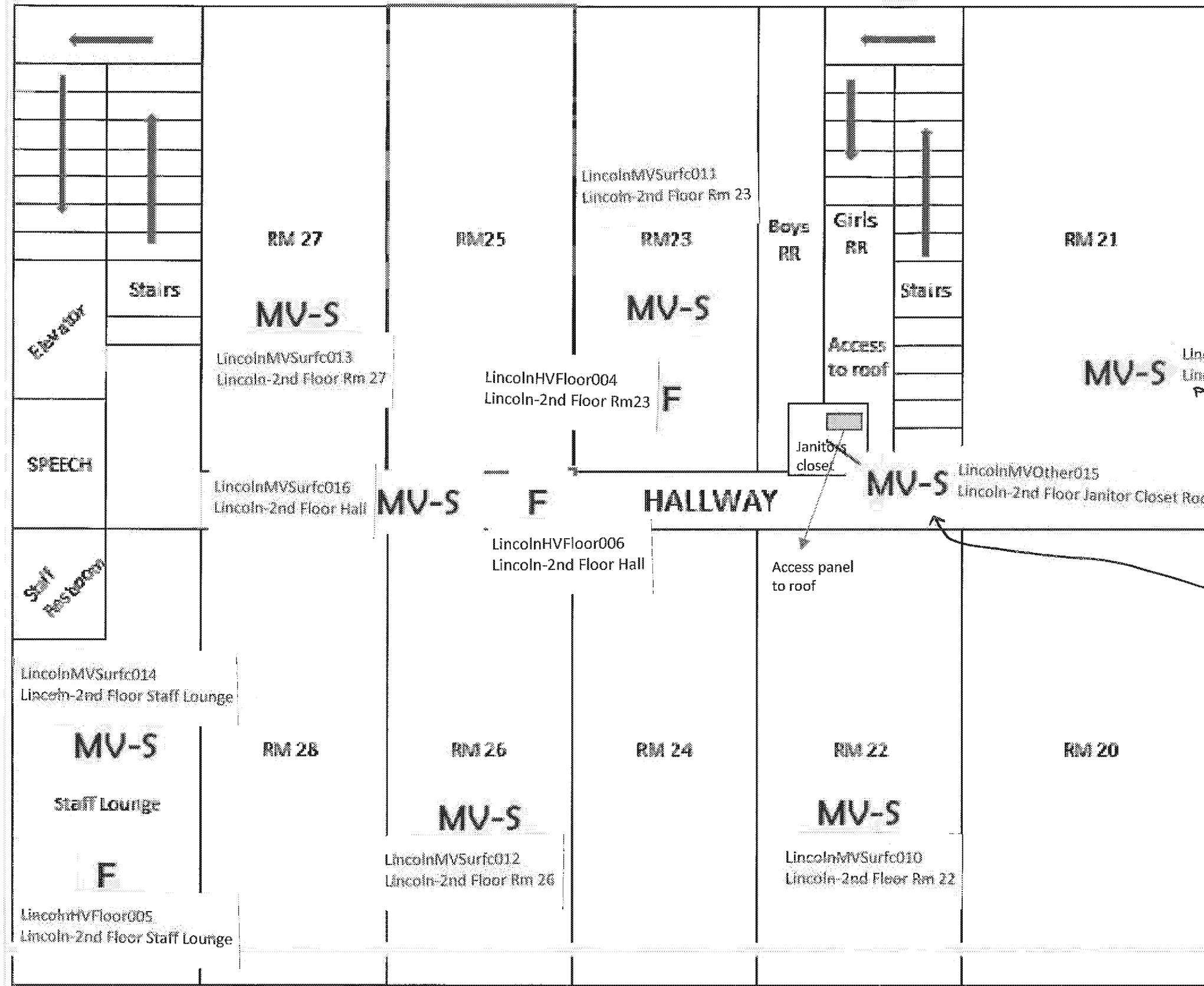
- LincolnHVFlmatRinsate0002  
Lincoln Floor Mat Rinsate
- LincolnHVFlmatRinsate0003  
Lincoln HV Surface rinsate
- LincolnHVFlmatRinsate0003 D  
Lincoln HV Surface Field Duplicate (D)
- LincolnMVSurf001 D  
Lincoln MV Surface Field Duplicate (D)
- LincolnMVSurf009 D  
Lincoln MV Surface Field Duplicate (D)

LincolnHVFlmat001  
Lincoln-1st Floor Main Door

# Lincoln Elementary – 2<sup>nd</sup> Floor

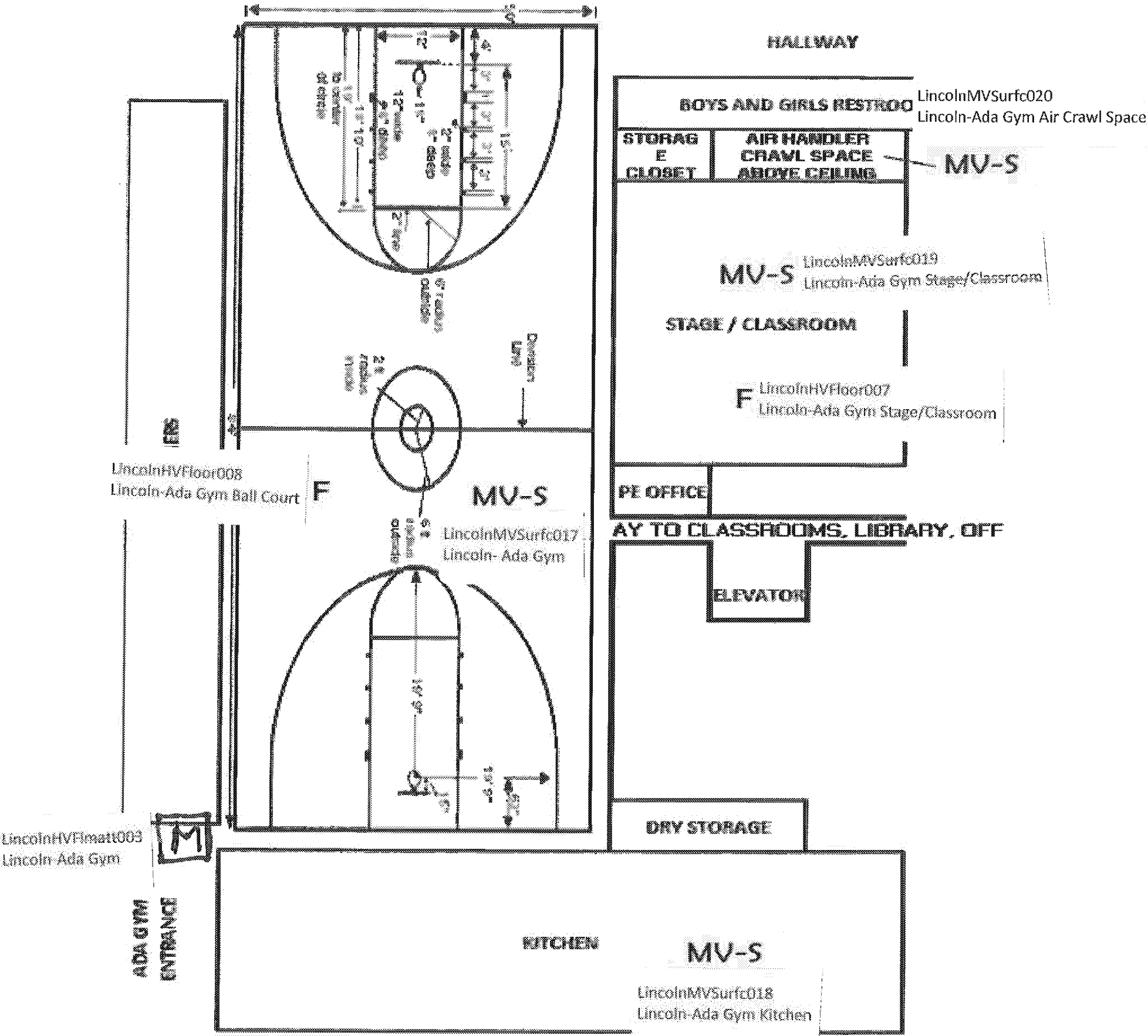
**F** = floor samples by HVS3 high-velocity vacuum (3)

**MV-S** = micro-vacuum surface samples (8)



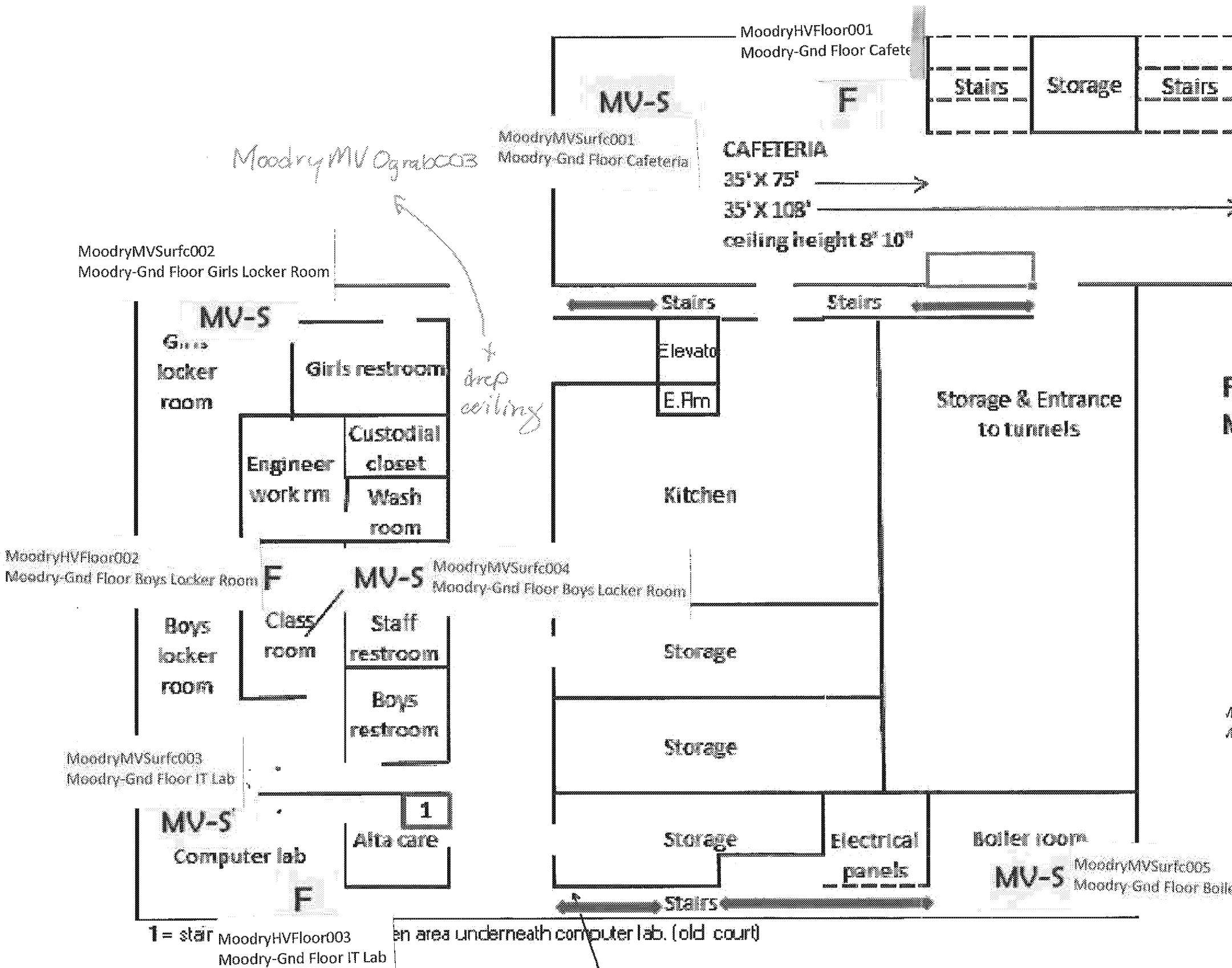
*Lincoln MVOgrab 001*  
LOCATION OF OPPORTUNISTIC MV SAMPLE

Lincoln Elementary – Ada Gym



F= floor samples by HVS3 high-velocity vacuum (2)  
MV-S = micro-vacuum surface samples (4)

# Moodry Middle School – Basement



**F = floor samples by HVS3 high-velocity vacuum (3)**

**MV-S = micro-vacuum surface samples (5)**

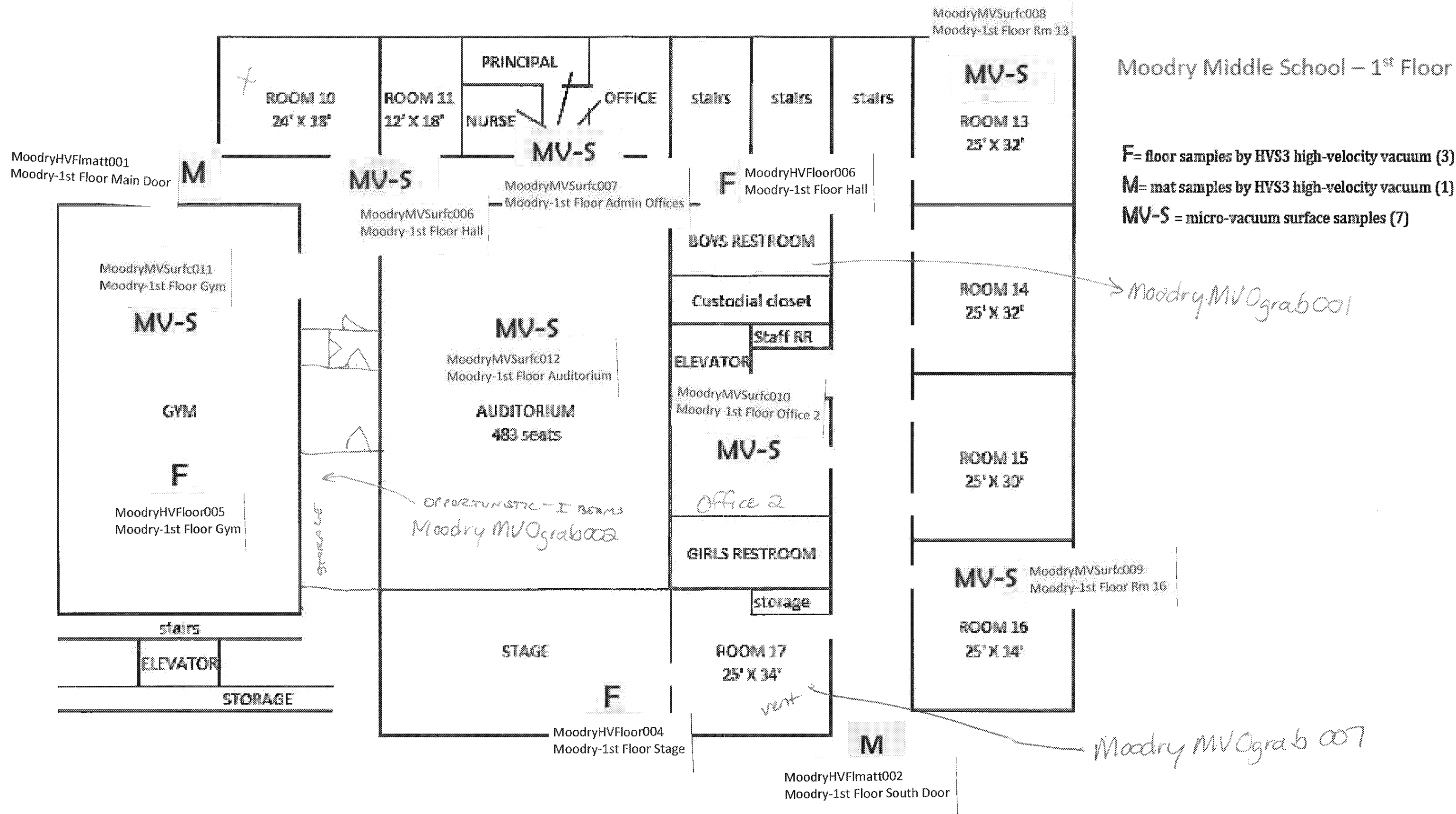
MoodryHVFloorRinsate002  
Moodry Floor Mat Rinsate

MoodryHVSurfRinsate002  
Moodry HV Surface rinsate

MoodryMVSurf 003 D  
Moodry MV Surface Field Duplicate (D)

MoodryMVSurf 004 D  
Moodry MV Surface Field Duplicate (D)

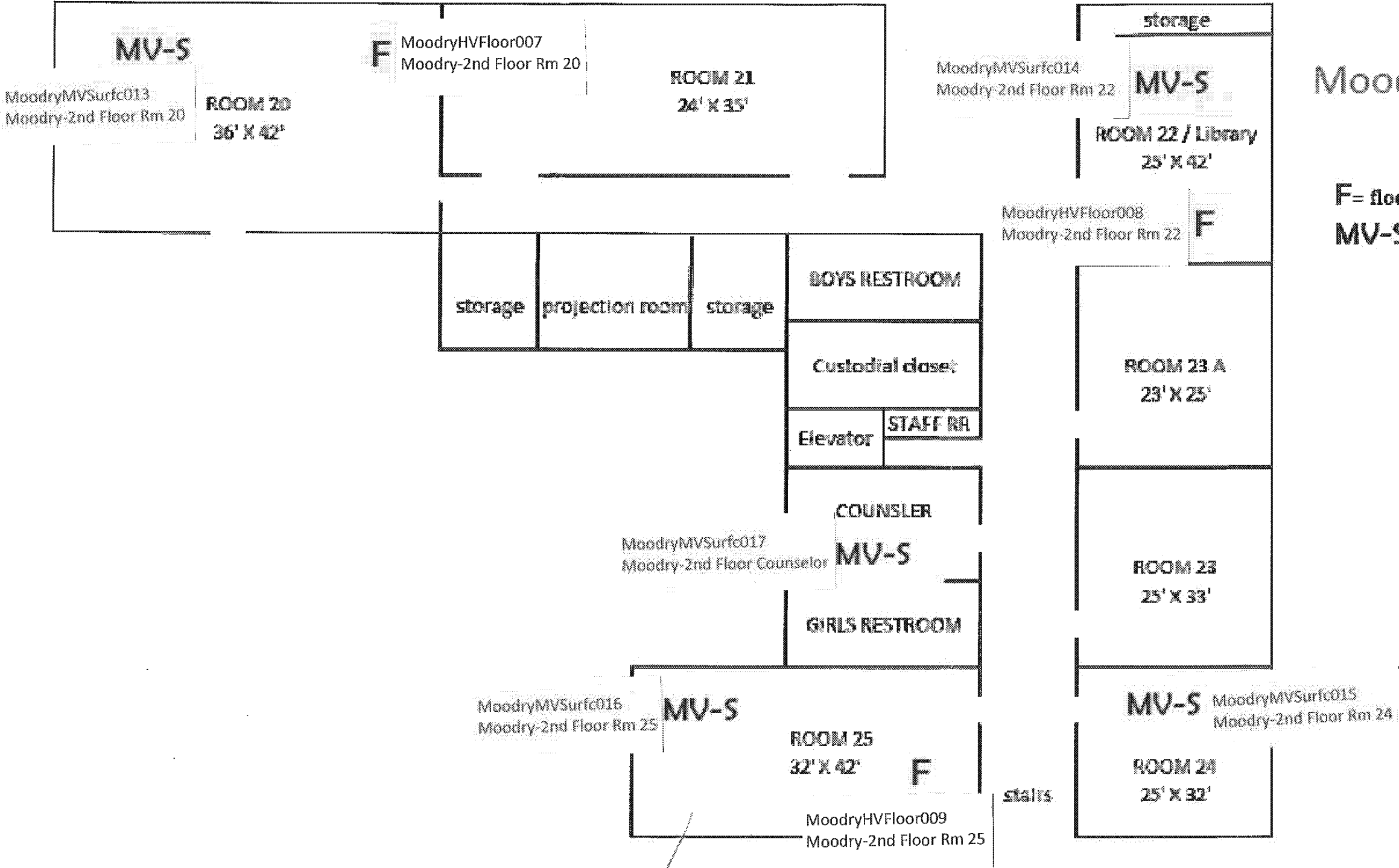
MoodryHVSurf 005 D  
Moodry HV Surface Field Duplicate (D)

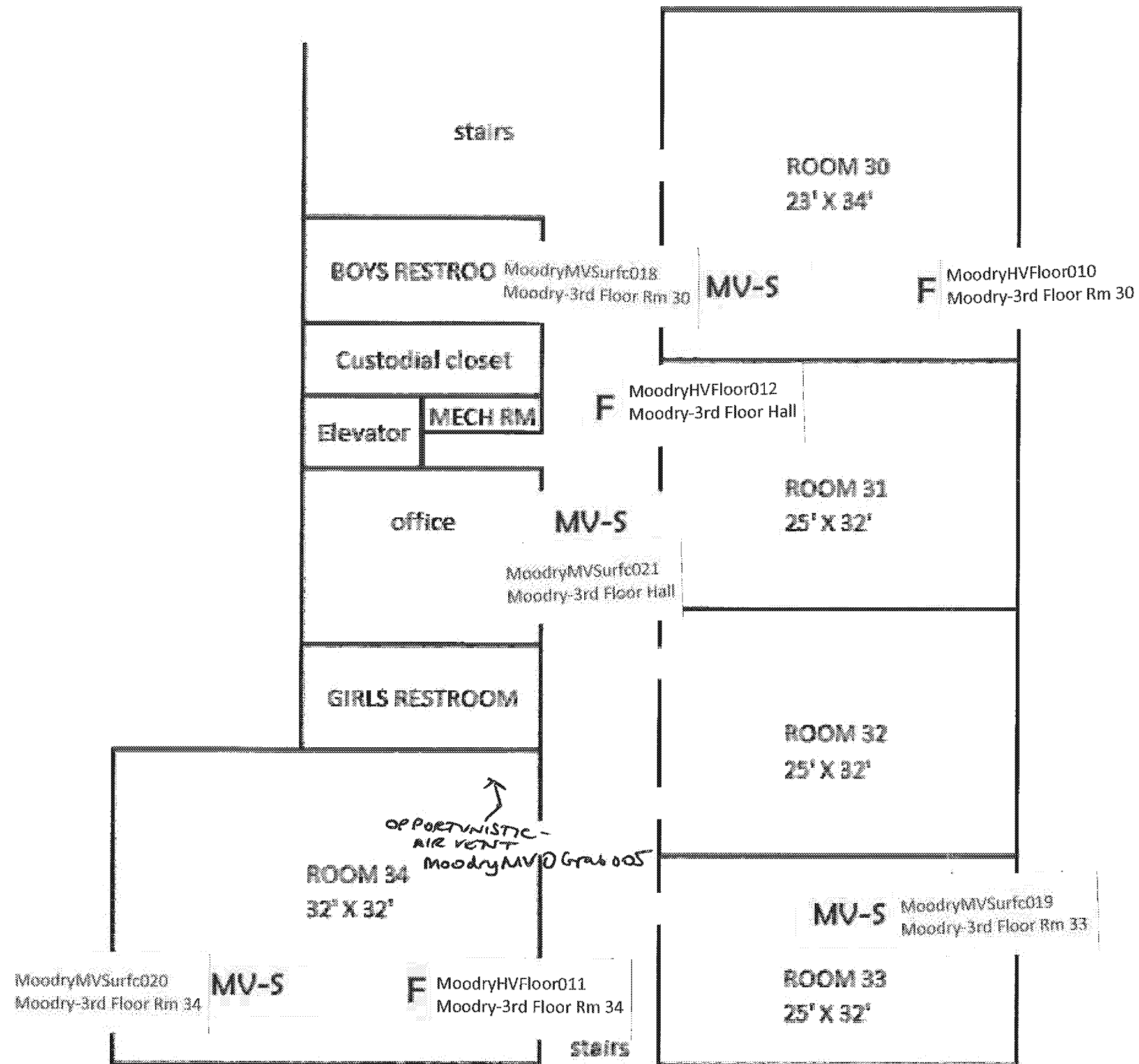




Moodry Middle School – 2<sup>nd</sup> Floor

**F** = floor samples by HVS3 high-velocity vacuum (3)  
**MV-S** = micro-vacuum surface samples (5)



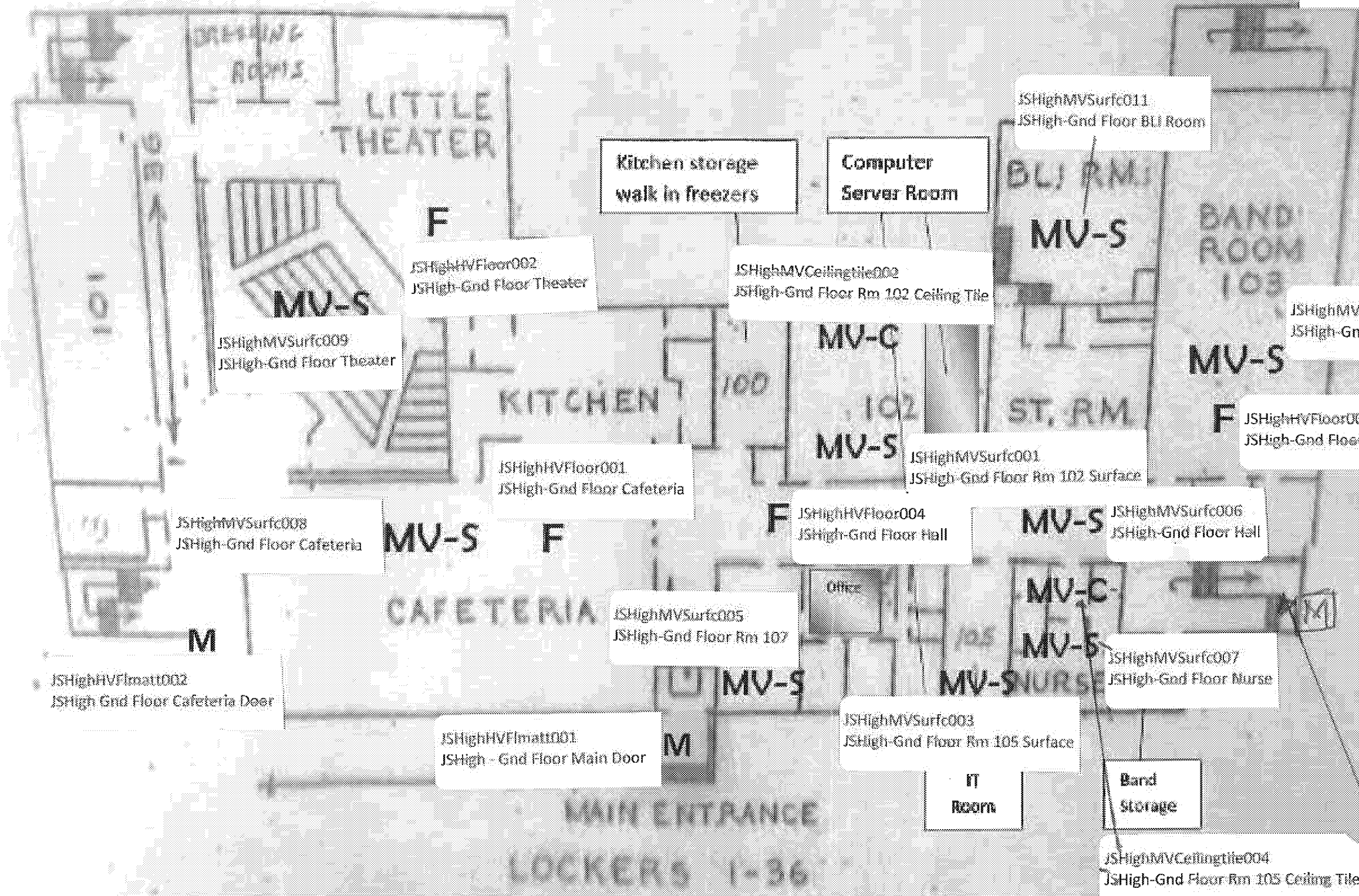


## Moodry Middle School – 3<sup>rd</sup> Floor

**F** = floor samples by HVS3 high-velocity vacuum (3)

**MV-S** = micro-vacuum surface samples (4)

# Anaconda High School – Ground Floor



**F=** floor samples by HVS3 high-velocity vacuum (4)  
**M=** mat samples by HVS3 high-velocity vacuum (1)  
**MV-S =** micro-vacuum surface samples (9)  
**MV-C=** micro-vacuum – top of ceiling tiles (2)

JSHighHVFloorRinsate002 (F)  
 JSHigh Floor Mat Rinsate **Done**

JSHighHVSurfRinsate003 (F)  
 JSHigh HV Surface rinsate **Done**

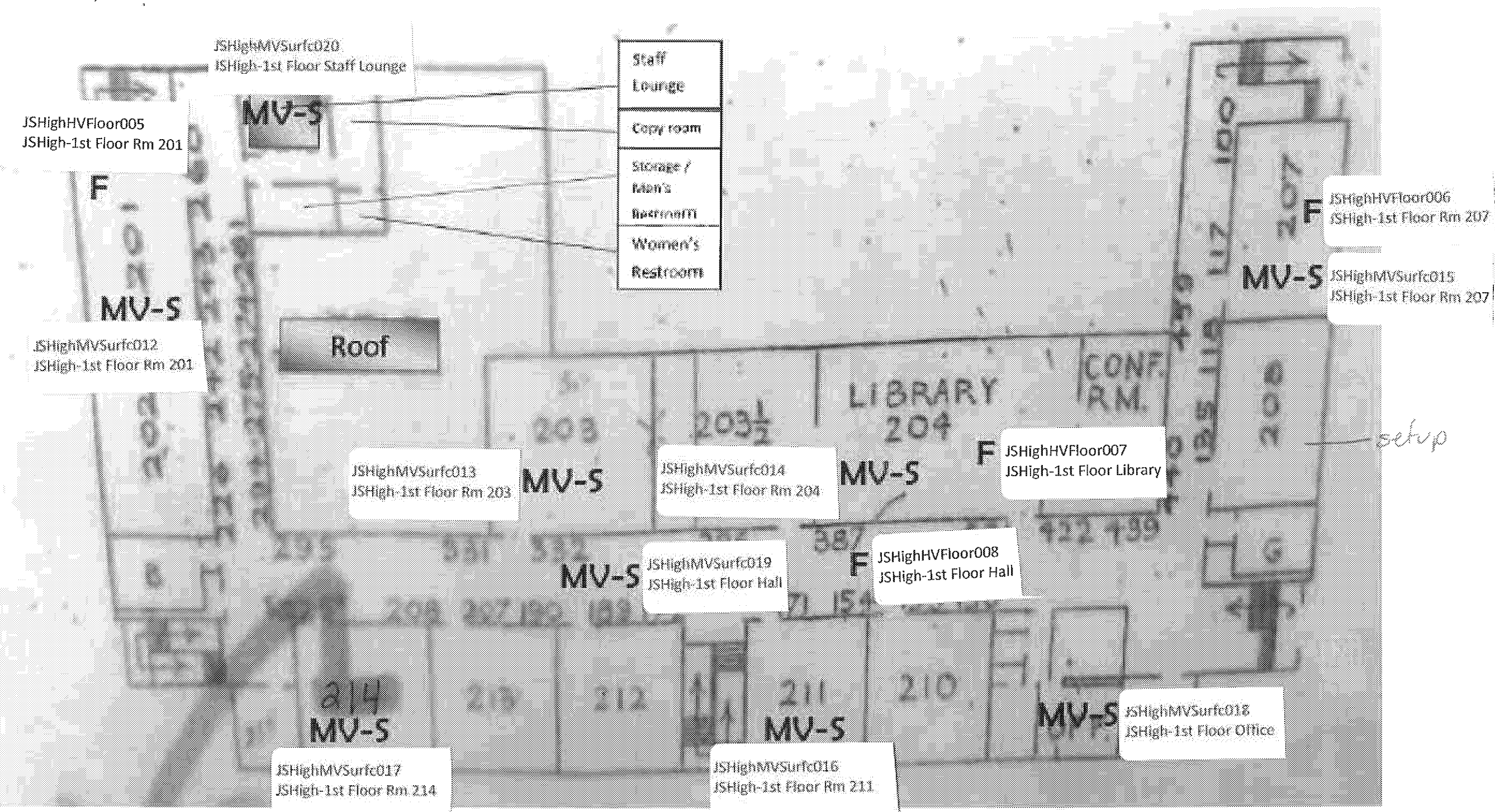
JSHighMVSurf 006 (D)  
 JSHigh MV Surface Field Duplicate (D) **Done**

JSHighMVSurf 026 (D)  
 JSHigh MV Surface Field Duplicate (D) **Done**

JSHighHVSurf Floor 002 (D)  
 JSHigh HV Surface Field Duplicate (D) **Done**

JSHighHVFloorRinsate003 (F)  
 JSHigh HV Surface Field Duplicate **Done**

JSHighHVSurf 003 (D)  
 JSHigh HV Surface Field Duplicate **Done**

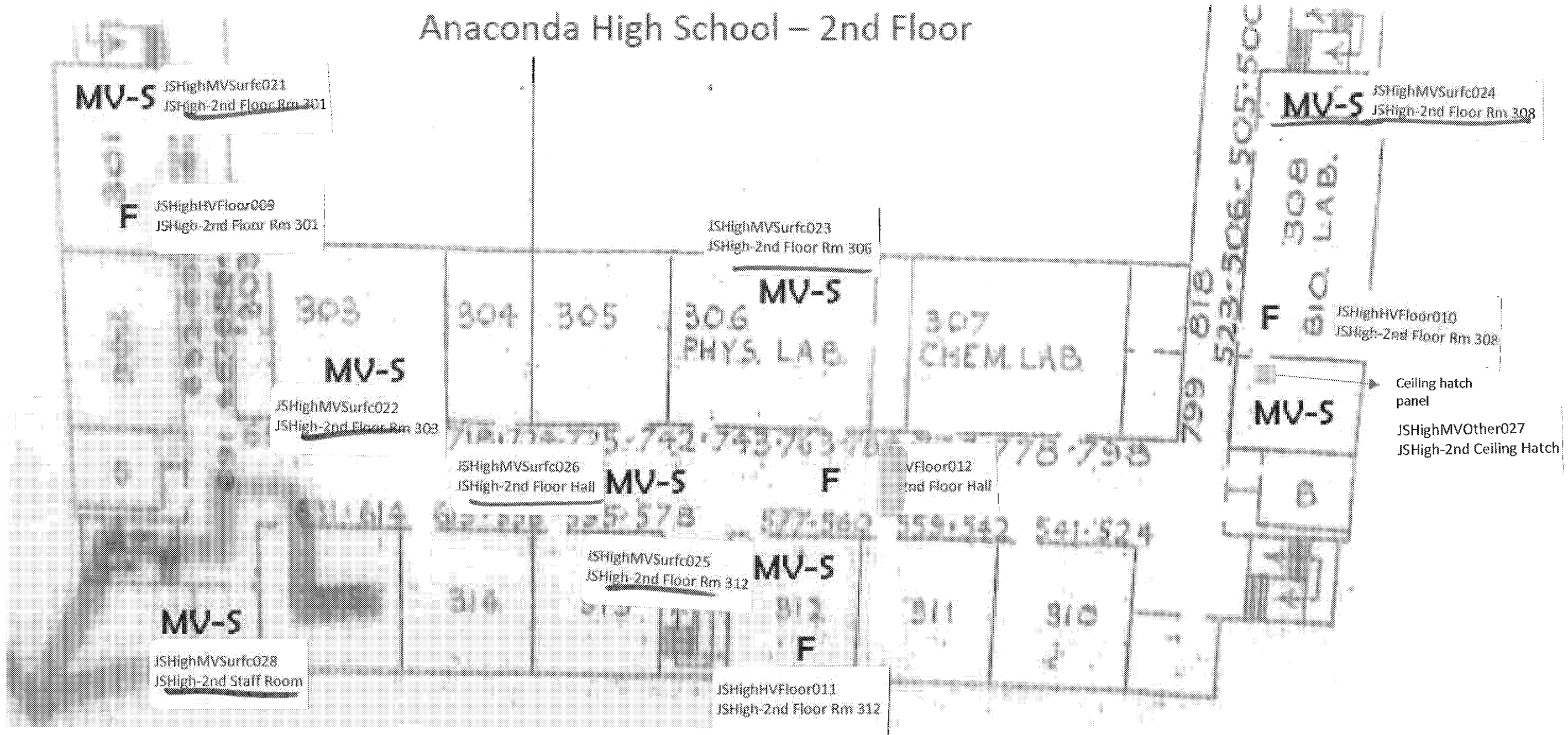


Anaconda High School – 1st Floor

F= floor samples by HVS3 high-velocity vacuum (4)

MV-S = micro-vacuum surface samples (9)

# Anaconda High School – 2nd Floor



**F** = floor samples by HVS3 high-velocity vacuum (4)

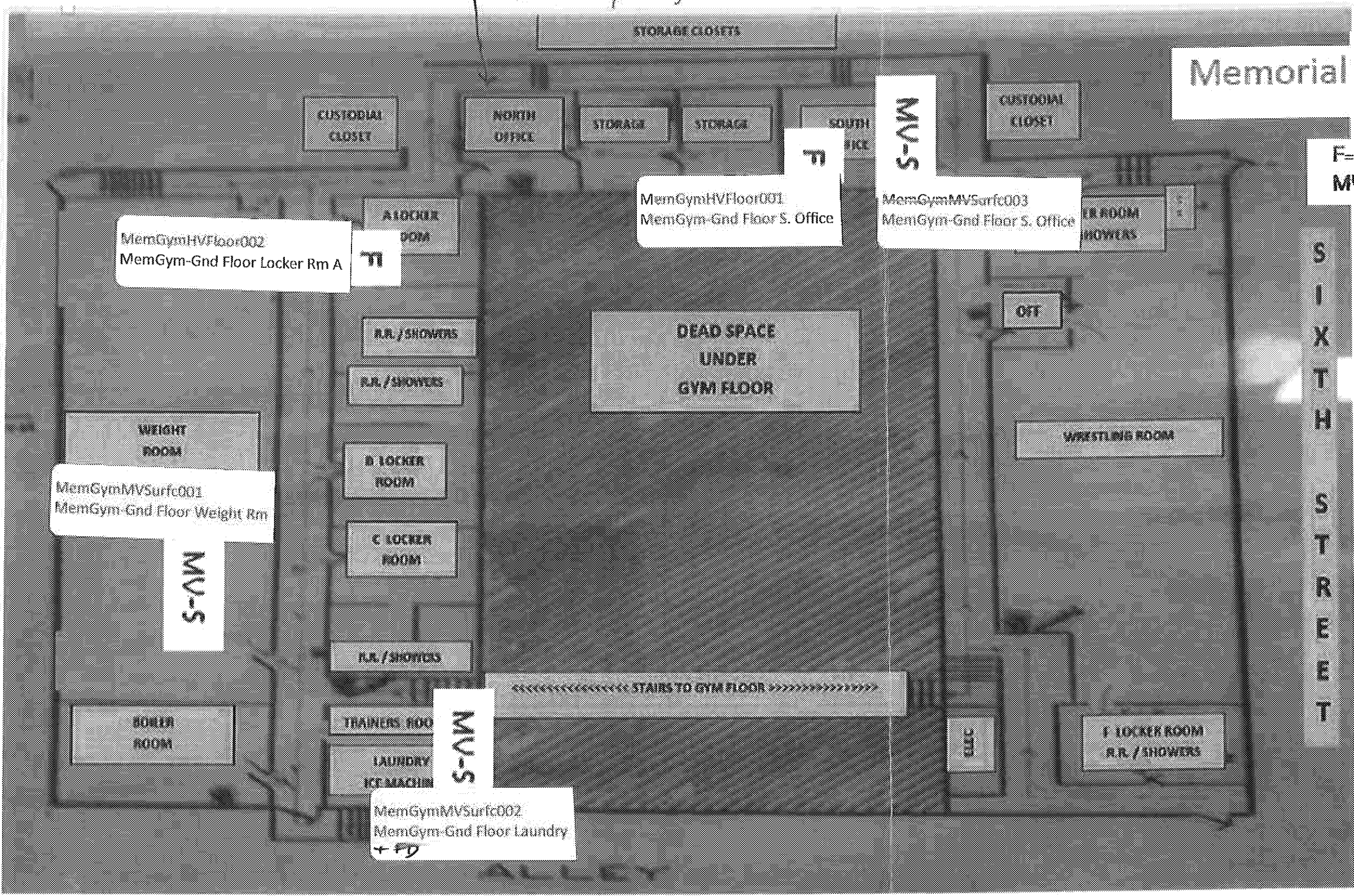
**MV-S** = micro-vacuum surface samples (8)



OPPORTUNISTIC SAMPLE  
- CONC. SHOT ~~ROOM~~  
BOT BLOW VENT.  
Mem Gym Grab 002 I

# Memorial Gym – Basement Floor

F = floor samples by HVS3 high-velocity vacuum (2)  
MV-S = micro-vacuum surface samples (3)

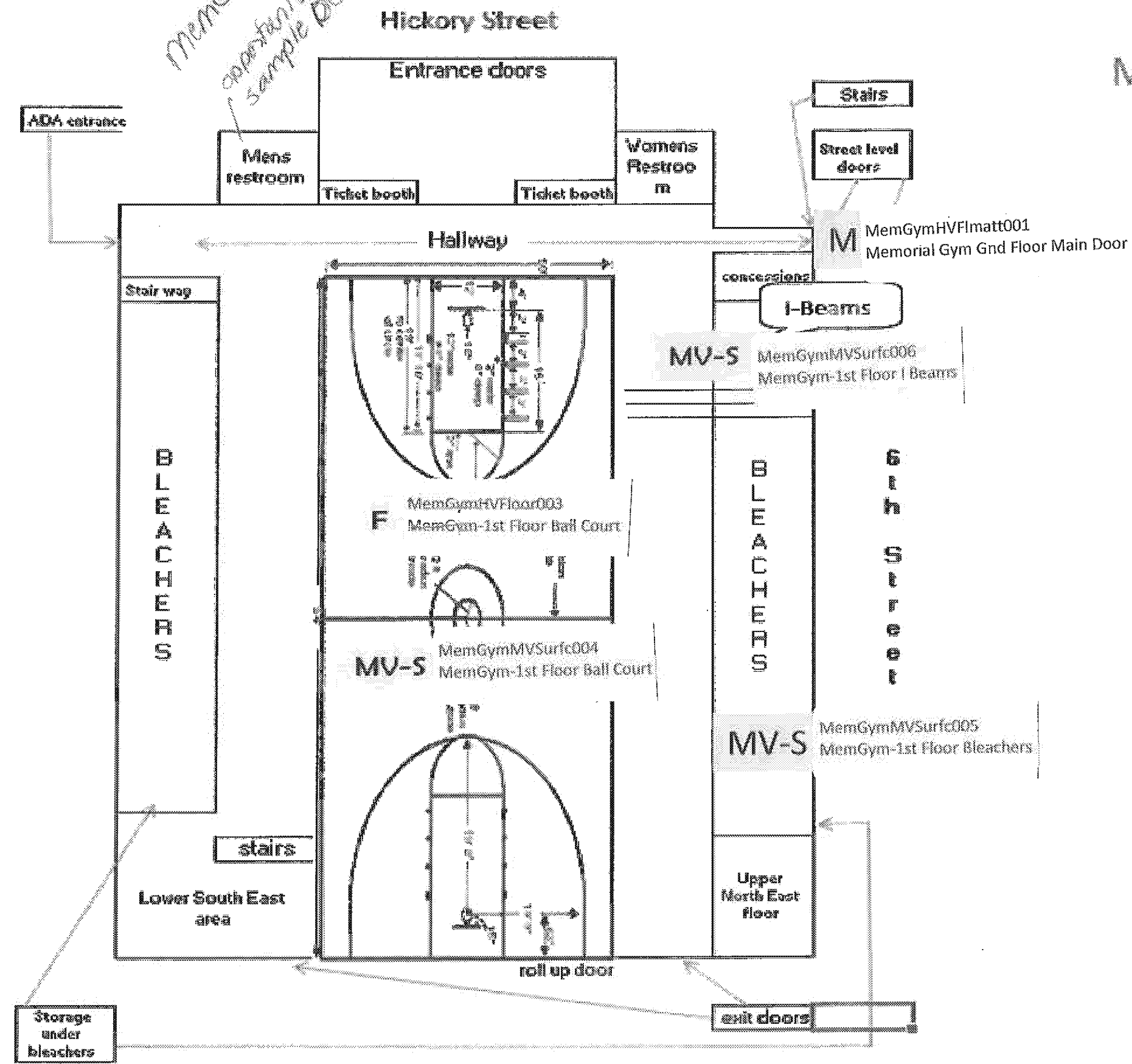


- MemGymHVFloorRinsate004  
Memorial Gym Floor Mat Rinsate
- MemGymHVSurfRinsate004  
MemGym HV Surface rinsate
- MemGymHVSurf Floor D  
MemGym HV Surface Field Duplicate (D)
- MemGymMVSurf 006 D3  
MemGym MV Surface Field Duplicate (D)
- MemGymMVSurf 002 D  
MemGym MV Surface Field Duplicate (D)

*MemGymGrab  
opportunity  
sample DOA*

# Memorial Gym – Main Floor

**F** = floor samples by HVS3 high-velocity vacuum (1)  
**MV-S** = micro-vacuum surface samples (3)



## Appendix E

### Electronic Data CD